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Draft
Development Concept Plan / Interpretive Prospectus
Environmental Assessment



Middle Gorge
NEW RIVER GORGE
National River • West Virginia

SA



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Development Concept Plan / Interpretive Prospectus
Environmental Assessment
March 1993

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National Park • West Virginia

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INTRODUCTION

THE NATIONAL RIVER

This *New River Gorge: Middle Gorge Development Concept Plan/Interpretive Prospectus/Environmental Assessment* represents another step in the planning, management, and development of New River Gorge National River in West Virginia. The national river includes a portion of the New River and its narrow gorge as they traverse the Appalachian Mountains in southern West Virginia (see Location map). The 50-mile long, 62,000-acre national river corridor, which runs from the town of Hinton in the south to just north of the US 19 bridge near Fayetteville, was created on November 10, 1978, by Public Law 95-625 "...for the purpose of conserving and interpreting outstanding natural, scenic and historic values and objects in and around the New River Gorge and preserving as a free-flowing stream an important segment of the New River in West Virginia for the benefit and enjoyment of present and future generations."

In the years since the establishment of the New River Gorge National River, a number of planning documents have been prepared that set the stage for more detailed planning and established the philosophical framework for site-specific decision making. Those documents also include statements of park purpose, significance, and management objectives.

Purposes

The purposes identified for New River Gorge National River are as follows:

Conserve and interpret outstanding natural, scenic, and historic values and objects in and around New River Gorge.

Allow resource-based recreation that does not impair resource values.

Significance

The following statements summarize the significance of resources at the national river:

Size and topographic relief make the gorge an outstanding scenic resource in West Virginia.

New River Gorge provides some of the best whitewater rafting in the eastern United States.

New River is the best warm-water stream fishery in the state.

New River is believed to be the oldest river on the North American continent.

The river corridor has resulted in unusual plant and animal diversity.

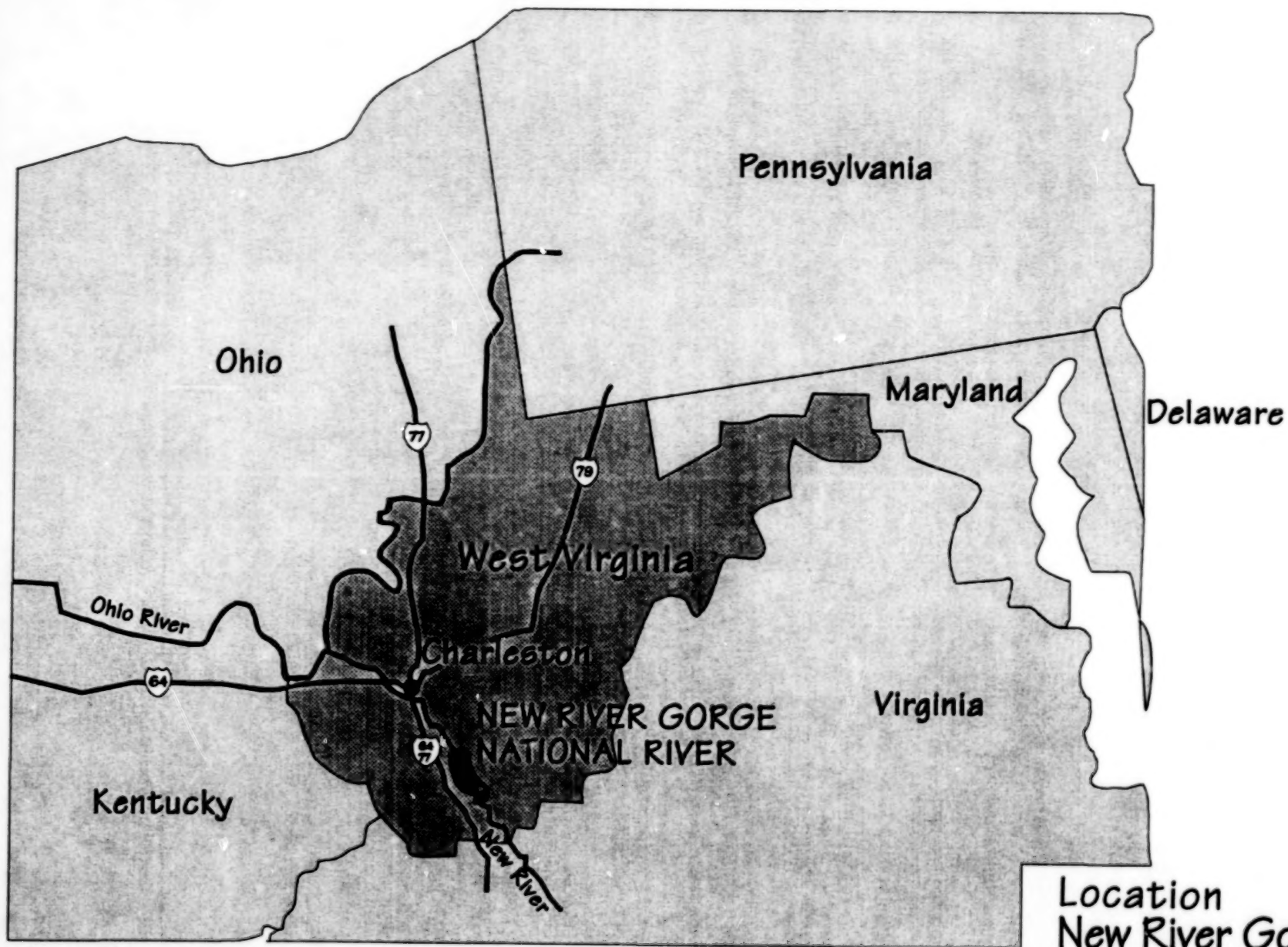
New River Gorge contains remains of mining and transportation of "smokeless" coal, which played a major role in America's industrial history.

Management Objectives

On the basis of the purpose and significance of the resources, a series of more specific management objectives was formulated for New River Gorge National River. These objectives represent goals toward which park management will work.

Protect and maintain the natural diversity of plants and animals.

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Location
New River Gorge
National River

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Sustain the warm-water fishery while protecting natural diversity.

Preserve outstanding scenic views in and around the gorge — preserve the predominant natural setting in the gorge from Interstate Highway 64 north and the rural pastoral scenery south of I-64.

Encourage visitors to use related interpretive and recreational sites outside the national river boundary.

Preserve coal mining, railroading, and other historic resources that best illustrate the park's significance.

In cooperation with others, achieve and maintain water quality to meet state standards that allow for primary human contact.

Develop a system of land-based and water-based recreational opportunities that allows visitors to experience the national river's resources to the extent that natural, cultural, and scenic values are not impaired.

Work with local towns and communities associated with New River to help perpetuate their character and vitality.

Work with the communities to the extent possible to help them maximize economic benefits related to park development without impairing natural and cultural resources.

Planning Units

To facilitate detailed planning and development, the national river corridor has been divided into a series of sections whose character and resources suggest they should be dealt with as separate planning units. A planning unit is a section of a park

that has both physical and visitor use characteristics that differentiate it from other sections of the park. At New River Gorge National River there are four such geographic areas that have been designated as planning units. Moving from south to north (following the flow of the river) those units are Upper Gorge, Unit 1; Glade Creek, Unit 2; Middle Gorge, Unit 3; and Lower Gorge, Unit 4 (see Planning Units map).

THE MIDDLE GORGE PLANNING UNIT

Several recent development concept plans have addressed major sites in the Middle Gorge: Stone Cliff, 1989; Thurmond and Glade Creek, 1990; and Grandview, forthcoming. This document addresses all remaining sites within the Middle Gorge Planning Unit.

The Middle Gorge is sinuous and steep-sided, cloaked in secondary growth of mixed hardwoods that have returned after intensive logging of the 19th and early 20th centuries. The New River itself is calmer here than in the lower gorge, offering whitewater rafting for relatively less experienced rafters, kayakers, and canoeists, as well as quiet stretches favored by boat-based anglers. Traditionally, local and regional visitors have camped and fished along the banks.

Unlike some units in the national river, the inner gorge in Middle Gorge is accessible via an all-weather, graded road (McKendree Road), which parallels the CSX Corporation (CSX) Railroad along the river's eastern (right) shore. A paved state road also crosses the unit; that road provides easy access to several small communities within the national river boundary. However, the character of the Middle Gorge remains rural and peaceful, disturbed only by passage of heavily laden coal trains, an occasional passenger train, and, increas-

UNIT 4 LOWER GORGE

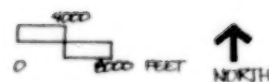


UNIT 3 MIDDLE GORGE

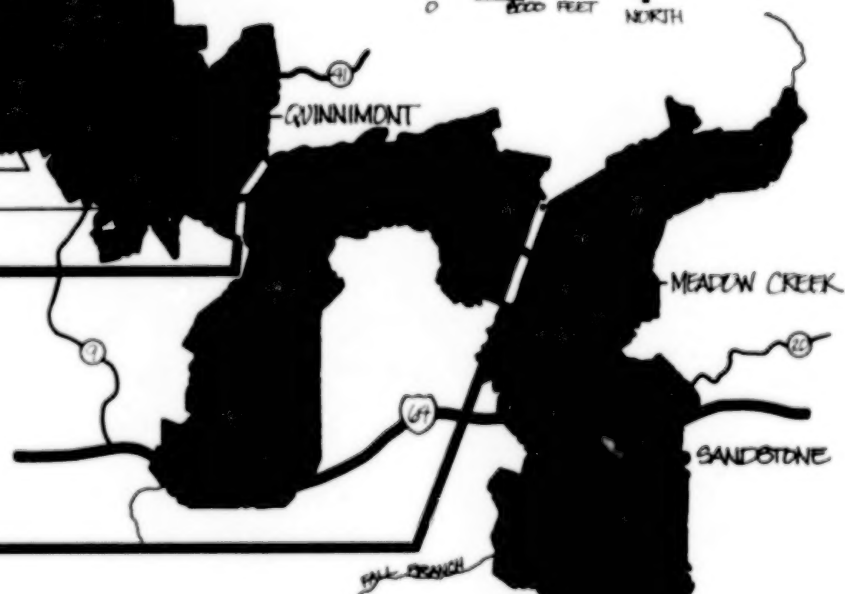


STONE CLIFF
THAYER

McCREERY
GRANDVIEW



UNIT 2 GLADE CREEK



UNIT 1 UPPER GORGE

Planning Units

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ingly, more adventurous motoring tourists hoping for glimpses of the quiet, secluded character of the nation's oldest living river.

The human history of the Middle Gorge was dominated in the 19th and early 20th centuries by the production and shipment of "smokeless" coal, a critical product fueling industrial development along much of the eastern seaboard. Small towns of that era nestled in the inner gorge along the Chesapeake and Ohio (now CSX) Railroad, and the prime economic forces of the Middle Gorge were maintenance of the rail system and the loading, mining,

and transport of coal to a railhead. With depletion of local coal seams and development of alternative sources or fuels, local communities have shrunk gradually; some have disappeared altogether, while others continue with relatively few permanent residents whose livelihoods generally depend on work outside the immediate community. Since little modern development of either residences or services has taken place in these communities, they continue to exhibit the rural architectural style and character of the historic era of mining and transportation.

PURPOSE OF AND NEED FOR THE PLAN

PURPOSE

The purpose of this plan is to provide a specific course of action for resource preservation, interpretation, recreation, and physical development of the Middle Gorge Planning Unit. The area covered is the part of the planning unit from Mill Creek north to a point south of Stone Cliff (see Planning Units map). A separate study was prepared earlier to guide development of the part of the planning unit north of Stone Cliff, including the historic district of Thurmond.

In accordance with National Park Service policy and the requirements of the National Environmental Policy Act (NEPA), this document presents a proposal and several alternatives that were considered in developing that proposal.

NEED

A plan for the Middle Gorge is needed because site-specific planning has been done only for two small parts of this unit, Thurmond and Stone Cliff. Earlier documents made only general reference to the character, visitor use potential, and management objectives of the unit. These generalities must be translated into specific site-by-site proposals, and the environmental consequences of those proposals must be analyzed before specific management actions can be implemented or construction can begin.

PLANNING OBJECTIVES AND ISSUES

Previous Planning Background

Like other units of the National Park System, planning and development of New

River Gorge National River is proceeding from the general to the specific. The process began with a broad statement of the area's purpose and significance in the legislation establishing the park (1978) and continued with a more comprehensive conceptual statement called a general management plan (1982). That statement was further refined with management and development guidelines (1988) and an interpretive program plan (1988). With guidance from those previous documents, New River is now moving to site-specific development concept plans. Several recent plans have addressed major sites within the Middle Gorge: Stone Cliff, 1989; Thurmond, 1990; Glade Creek, 1990; and Grandview, forthcoming. This document addresses all remaining sites in the Middle Gorge Planning Unit.

Planning Vision and Objectives

By returning to the basic purpose and significance statements it is possible to articulate a broad future vision of what the Middle Gorge should provide to the visiting public. It should be an area of the national river that retains its rural character, encourages quiet exploration of natural and cultural resources with a minimum of physical development, and allows simple access to the river's variety of recreational pursuits. This vision has been translated into a set of specific planning objectives, which are listed below. There is only one vision and one set of planning objectives — each alternative described in the next chapter, including the preferred alternative, has been developed to meet the same vision and planning objectives.

To conserve the outstanding natural, scenic, and cultural resources of the

Middle Gorge while retaining its rural character.

To provide a range of recreational opportunities for park visitors within the Middle Gorge, and to determine the type and scale of facilities and roads to serve both visitor and administrative needs.

To select appropriate location(s) for safe and efficient launching facilities for river rafters and boaters.

To minimize or avoid potential conflicts that may occur between park visitors and local residents as areas within the Middle Gorge are made more accessible and more people come to enjoy the resources of New River Gorge National River.

To interpretively link various sites in the Middle Gorge so that they provide visitors with information necessary for a safe and enjoyable experience, and to foster understanding and appreciation of the natural, cultural, and recreational resources of the area.

Issues

Through public meetings and discussions with local groups and with commercial and private interests, the following specific issues were raised for consideration in this plan for development in the Middle Gorge.

Many visitors come to New River Gorge for exciting whitewater rafting opportunities. Others from both outside and nearby communities may be drawn for fishing, picnicking, camping, or enjoyment of the scenic beauty of the gorge from roads and trails. How should the recreational needs of a variety of visitors be met without infringement on the rights of any group,

while the objective of preserving the area's resources is still met?

Where should access point(s) be developed in the planning area for people who want to fish, swim, and raft the river, and what kind of facilities are necessary?

As use of the Middle Gorge by both commercial and private boaters increases, what measures, if any, need to be considered to regulate this activity and ensure that resources along the river do not become overused? (Note that it is actually the state of West Virginia that has the responsibility for regulating all commercial watercraft services in the national river.)

What can be done to resolve complaints about visitor conduct at Grandview Sandbar and Army Camp?

Is there a way to preserve the rural life style and character of Middle Gorge communities while at the same time encouraging and providing for additional visitor use and access?

How should the area's cultural and natural resource features be interpreted so as to communicate to visitors the rich history and beauty of New River Gorge?

What use, treatment, and interpretation are appropriate for buildings and other cultural resources that have been acquired by the National Park Service in the Middle Gorge planning area (such as Prince Brothers Store; Thayer Church; houses, churches, and coke ovens in Quinimont; farmstead at Mill Creek; and McKendree Hospital site)?

Should the McKendree road be developed as a scenic road for park

PURPOSE AND NEED

visitors or remain an unimproved access primarily for local residents? If it is to be a scenic route, what improvements are required and to what standard should the road be reconstructed?

What use(s) should be encouraged or developed at Army Camp and Grandview Sandbar?

Interpretive Themes

The existing *Interpretive Program Plan* includes recognition of the need for a specific interpretive approach for each individual planning unit. This *Development Concept Plan/Interpretive Prospectus/Environmental Assessment* contains the interpretive approach for Middle Gorge, including a detailed interpretive prospectus for the preferred alternative. As guidelines, the *Interpretive Program Plan* (NPS 1989) contains the following principal themes, which should be regarded as priorities for all units.

New River Gorge National River today represents a change in American val-

ues and the perception of wildlands over the last 200 years — from that of wilderness as a barrier to human progress to that of wildlands for inspiration and recreation.

New River is unique because it was formed much earlier than most of the rivers we see today, and, unlike most rivers, the New has retained its course despite significant geological changes.

The character of the New River and its gorge has resulted in a significant concentration of biological and cultural diversity which is well illustrated in the park.

New River Gorge exemplifies the rapid industrialization of America at the turn of the 20th century. This industrialization prompted major man-made changes in the gorge's ecosystem and the appearance of the landscape.

In order to successfully find, use, and enjoy park resources, visitors to the park require special information.

ALTERNATIVES, INCLUDING THE PREFERRED ALTERNATIVE

OVERVIEW

Four alternatives are considered in this document, including a preferred alternative (alternative D), which was formulated after consideration of the first three. Alternatives A, B, and C provide a spectrum ranging from "no action" (continuation of present management) through emphasis of on-river recreation to emphasis on recreation and interpretation on land. Alternative D, in an effort to balance various uses, has elements of the other alternatives. Physical development and capital expenditures in each alternative generally would follow the primary emphasis of that alternative.

Because several cultural resource properties in the Middle Gorge have been listed on the National Register of Historic Places or appear to be eligible for listing, their treatment in the alternatives requires special concern.

For readers especially interested in how the National Park Service approaches the treatment of properties listed or eligible for listing on the national register, a discussion has been provided in the Appendix. The Appendix also contains more detailed information about each of the historic properties in the Middle Gorge. This information will facilitate understanding as to why a certain alternative may have been considered or preferred.

Alternative A, present management (no action), would involve continuation of present management and activities as if no comprehensive plan had been adopted. Active management or protection of resources already underway would continue under normal policy guidance for an NPS area. Threats to resources at a site would be responded to on a reactive basis, and since there would not be a long-term ob-

jective for development at each site, only short-term decisions would be made. Minimum legal requirements such as safety matters and protection of federally owned historic structures would be fulfilled (see Alternative A map).

Alternative B, emphasis on recreation on the river, would focus on serving traditional on-river recreational visitors such as clients of commercial whitewater boating operations, private whitewater kayakers or canoeists, boat-based anglers, and campers boating to riverside campsites. Land activities such as vehicle-based camping, sightseeing, shore fishing, and exploration of historic resources would continue informally and without additional physical development (see Alternative B map).

Alternative C, emphasis on activities on river shore and surrounding lands, would entail emphasis on traditional vehicle-based camping areas, shore fishing opportunities, and preservation and appreciation of natural scenic and cultural resources on the surrounding land, rather than on activities on the river, as in alternative B. Only minor improvements would be made in river access for whitewater activities and boat-based anglers (see Alternative C map).

Alternative D, balanced land and water activities (preferred), would involve management balanced between traditional on-river activities and a variety of land-based activities. Some activities, like commercial whitewater rafting or vehicle-based primitive camping and fishing, are already common practice and attract knowledgeable special-interest visitors; others, such as sight-seeing, picnicking, and exploration of cultural resources along the river's edge or in local communities, are not yet common,

but such activities might broaden the appeal of the Middle Gorge to local residents (see Alternative D map).

The alternatives are described in detail later in this chapter. A side-by-side comparison of the alternatives is presented in table 1, at the end of this chapter. No other alternatives were considered in detail because others suggested outside this range would have violated the general planning objectives for the Middle Gorge unit.

ACTIONS COMMON TO ALL ALTERNATIVES

Selection of any one of the alternatives would not relieve the National Park Service of its basic obligations to study, evaluate, preserve, and protect the resources of New River Gorge National River and to provide for a degree of public use that will not compromise the preservation objective. Thus, basic required protection of vegetation, wildlife, and scenic and historic resources would continue regardless of the alternative selected, as would maintenance of federal structures and roads or trails and enforcement of federal or special park regulations now in force.

Visitor access to resources along the river would continue to be allowed so long as regulations were obeyed and resources were not being degraded. The rights of private property owners within the park's authorized boundaries would continue unchanged. The activities of commercial operations such as whitewater enterprises in the park would continue under applicable state and federal regulation and supervision. Acquisition of additional private lands would continue under policies and priorities already established for the New River Gorge National River as a whole.

SITE-BY-SITE DESCRIPTION OF ALTERNATIVES

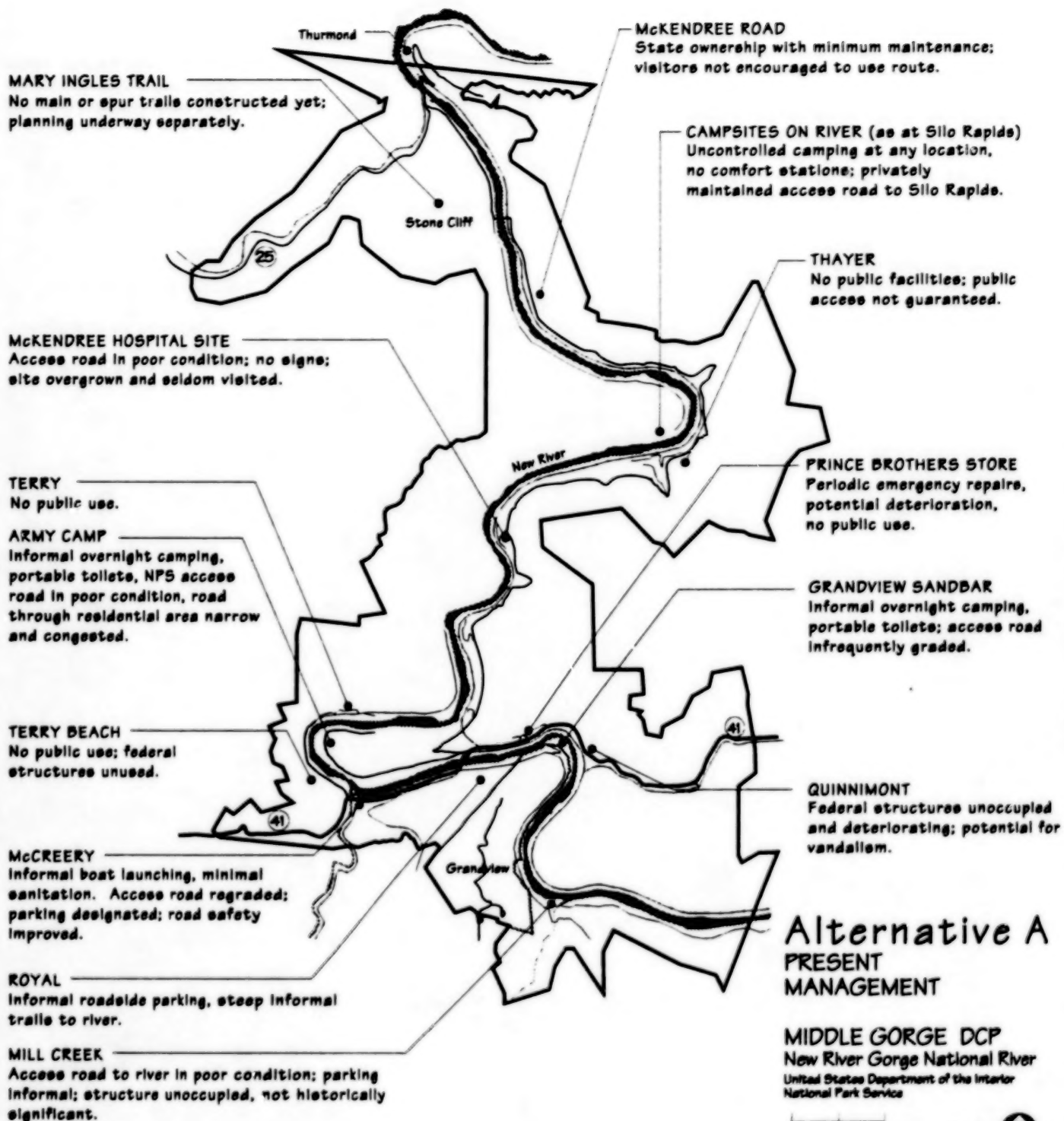
Alternative A: Present Management (No Action)

Mill Creek. Informal camping and fishing would continue at Mill Creek, as would uncontrolled parking. No change would be made in a rough access road open to the river's edge (used for informal boat launching) or in a deteriorating federally owned wooden structure and farmstead that does not appear to have historical significance.

Quinnimont. There is no public use of Quinnimont at present, and none would be expected under alternative A. Several houses and a church are federally owned. Those structures would continue to be unused and subject to continued deterioration and vandalism, although efforts would be made to protect them because of their apparent historic significance.

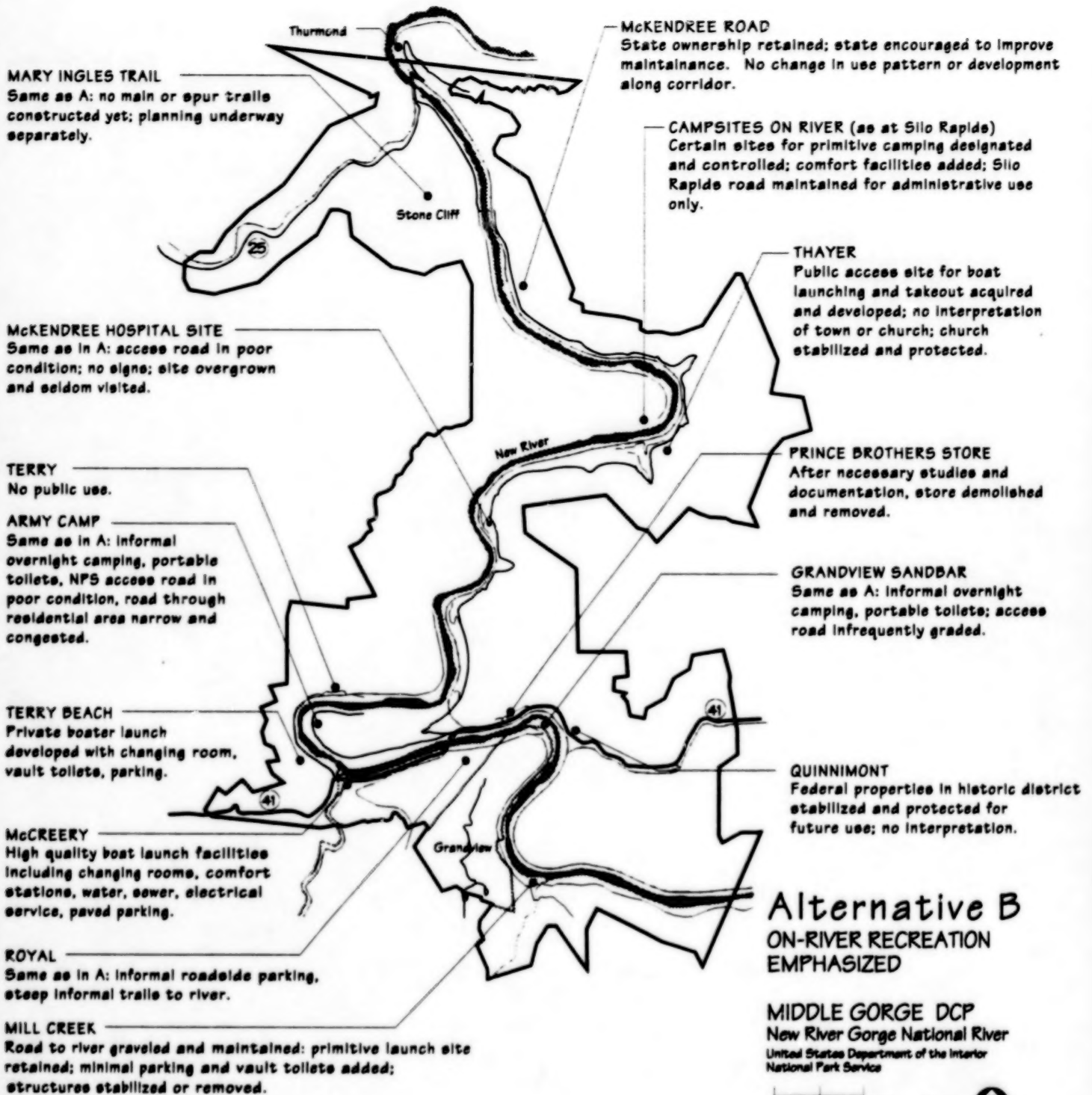
Grandview Sandbar. With no designated campsites, Grandview Sandbar would continue to be used for informal day use and overnight camping under alternative A. Use of a primitive boat launching area would continue. The Park Service would continue to provide minimal regulation, patrol, and trash and sanitation services. The access road, which was graveled and graded in 1992, would receive routine low priority maintenance.

Prince Brothers' Store. A site listed on the National Register of Historic Places, the Prince Brothers' Store would remain unoccupied and closed to public use. It is expected to require periodic emergency repairs, but it probably would continue to deteriorate in the absence of formal stabilization and preservation efforts. The potential for vandalism would remain high



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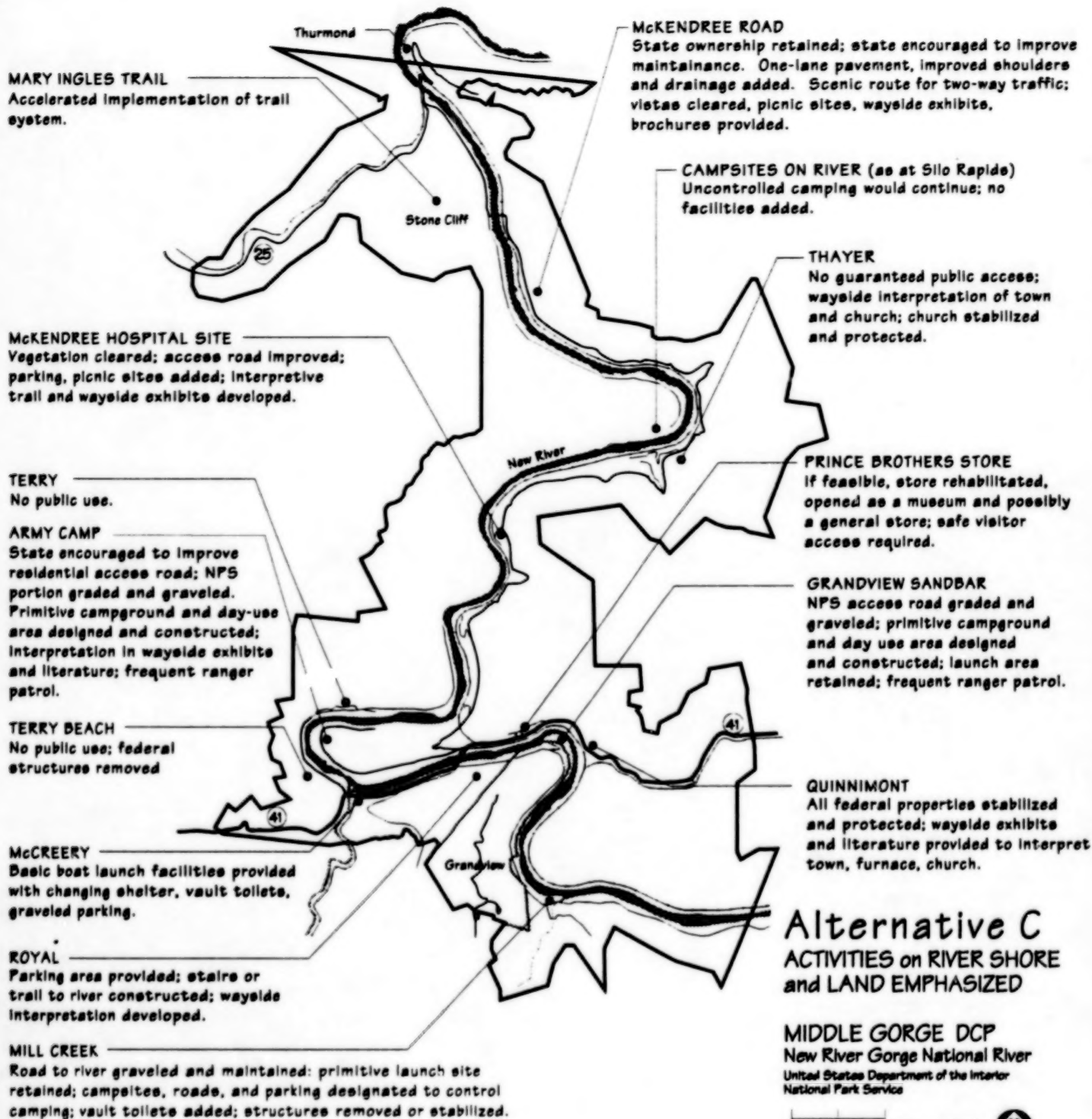


Alternative B ON-RIVER RECREATION EMPHASIZED

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MARY INGLES TRAIL

Same as A: no main or spur trails constructed yet. Planning underway separately.

McKENDREE HOSPITAL SITE

Same as C: vegetation cleared; access road improved; parking, picnic sites added; interpretive trail and wayside exhibits developed.

TERRY

No public use.

ARMY CAMP

Same as C but in phases.
Phase 1: state encouraged to improve residential access road; NPS portion graded and graveled.
Phase 2: primitive campground and day-use area designed and constructed; interpretation in wayside exhibits and literature; frequent ranger patrol.

TERRY BEACH

Same as C: no public use; federal structures removed

McCREERY

Same as B: high quality boat launch facilities including changing rooms, comfort stations, water, sewer, and electrical service; paved parking.

ROYAL

Same as C: parking area provided; stairs or trail to river constructed; wayside interpretation developed.

MILL CREEK

Same as C: road to river graveled and maintained; primitive launch site retained; campsites, roads, and parking designated to control camping; vault toilets added; structures removed or stabilized.

Thurmond

Stone Cliff

New River

Grandview

McKENDREE ROAD

State ownership retained; state encouraged to improve maintenance. All-weather gravel surface for scenic two-way traffic (not widened); limited vista clearing, a few picnic sites, simple wayside exhibits.

CAMPSITES ON RIVER (as at Silo Rapids)

Uncontrolled camping would continue; no facilities added; public education program developed to improve sanitation.

THAYER

NPS would ensure public access by acquiring land or negotiating cooperative agreement. Simple interpretation of town and church; church stabilized and protected.

PRINCE BROTHERS STORE

Store stabilized and protected for future use; barriers installed to discourage parking.

GRANDVIEW SANDBAR

Same as C but in phases.
Phase 1: NPS access road graded and graveled.
Phase 2: primitive campground and day use area designed and constructed; launch area retained; frequent ranger patrol.

QUINNIMONT

Federal properties in historic district stabilized and protected; wayside exhibits developed; town history interpreted at central location.

Alternative D (preferred) BALANCED LAND and WATER ACTIVITIES

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compared to buildings with daily use or occupancy by park staff. Safety considerations related to the structure's location near a busy, high-speed highway would be addressed only by the addition of barriers to discourage parking.

Royal. Under alternative A, Royal would continue simply as an informal site where vehicles park along the road edge and visitors gain access to the river via steep unimproved trails.

McCreery. Informal launch activity by commercial and private boaters at McCreery would continue under alternative A, and there would be no change in the minimal sanitation facilities. However, some changes in traffic circulation and parking facilities will be necessary to address safety concerns. The National Park Service would ask state authorities for safety improvements such as lower speed limits, speed reduction signs with flashing caution lights, and crosswalks (see the McCreery Launch Site, Alternative A map).

Terry Beach. Terry Beach would continue to be without public facilities. The federal structures and undeveloped lots, which are not open to public use, would remain unused.

Army Camp. With no designated campsites, Army Camp is used informally for day and overnight camping. Not currently publicized to general visitors, the area is primarily known only to local and regional campers. This situation would continue under alternative A, and the National Park Service would continue to provide minimal regulation, patrol, and trash and sanitation services. The federal portion of the access road would receive only routine maintenance at low priority, effectively limiting use to high clearance vehicles.

Terry. Terry consists of privately owned residences; no public services or access

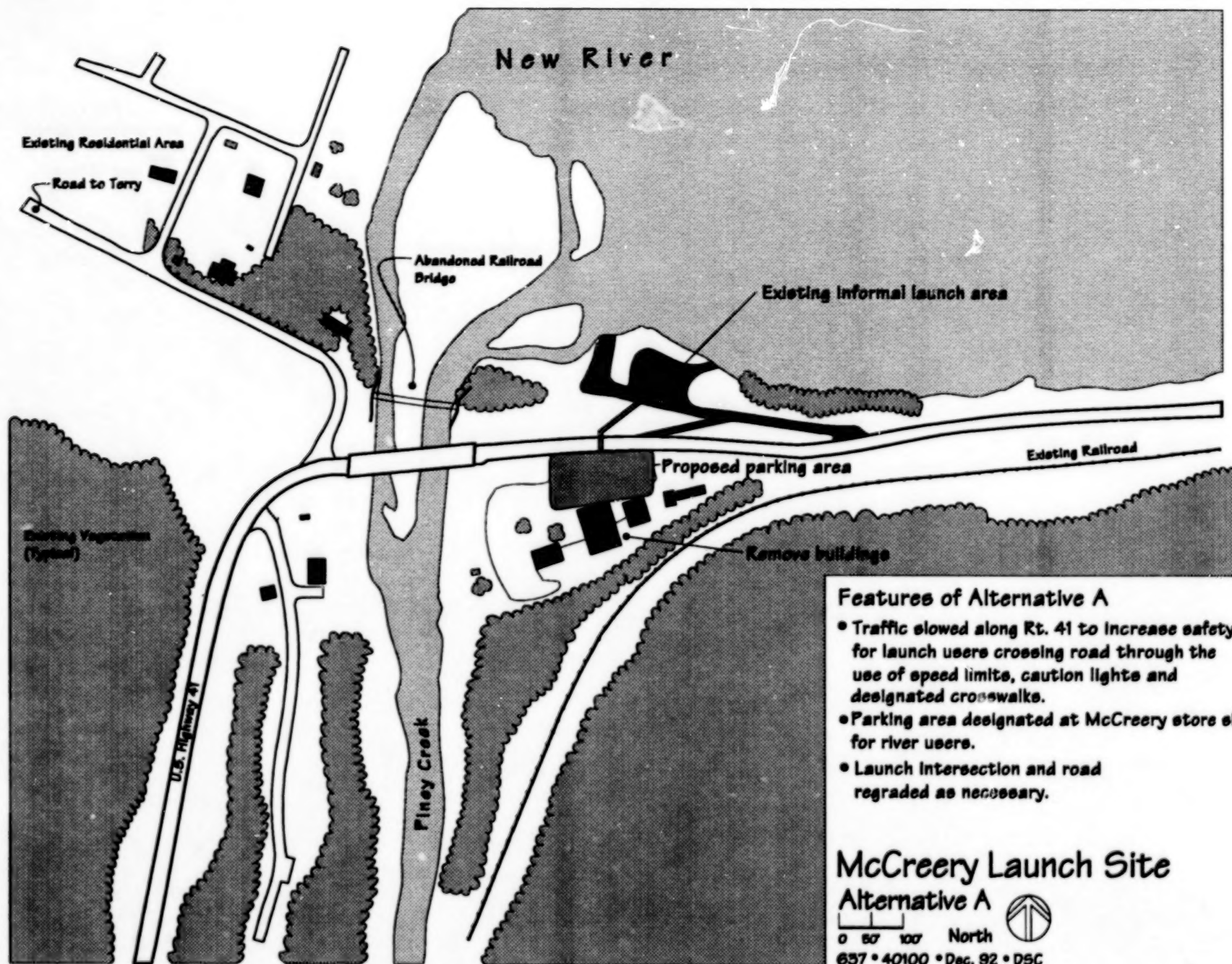
to the river are available. No change would be made in this area under alternative A.

McKendree Hospital Site. The access road to the McKendree hospital site is rough and the foundation ruins are heavily overgrown. No improvements would be made to either under alternative A. It is unlikely that visitors know of the existence of this historic resource, since it is not marked by signs or promoted in any way.

Thayer. A privately owned, informally operated camper-trailer park and boat storage/launch ramp are available at Thayer, but there are no federally owned public facilities. Use of the launch area is not necessarily guaranteed to all private or commercial boaters who might choose to use it. The only federally owned property, an old wooden church building that seems to be historically significant, is not open to the public. No changes would take place in Thayer under this alternative.

Campsites for Boater Use. Campsites such as those at the Silo Rapids site would continue to be used with minimal regulation or control and supervision by park staff. Sites currently are occupied on a first come, first served basis. Commercial operators and private boaters would continue to be responsible for their own activities, subject to existing regulations. No comfort stations are available at commonly used river-accessible campsites, so litter and human waste are either buried on-site or carried out at the discretion of the users. Commercial operators generally carry out human waste on overnight trips on a voluntary basis. A rough, privately maintained road along the western shore links Stone Cliff with Silo Rapids, one of the most heavily used overnight camping sites. This uncertain access would continue, subject to weather closures and the rights of private landowner(s) whose property is crossed by the road.

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McKendree Road. Use and maintenance of the unpaved McKendree road, which is owned and maintained by the state of West Virginia, would continue as at present. The standard of maintenance would remain low because the state has other priorities for its limited financial resources. Grading and repair of potholes or edge failures would continue to be infrequent, especially south of Thayer. The road's passability to passenger vehicles, especially in winter or rainy periods, would continue to be uncertain, and visitors to the national river would be discouraged from using the route.

Mary Ingles Trail. The trail system for the Mary Ingles Trail and other trails in Middle Gorge is under planning and development through a separate process. Since the probable route of the Mary Ingles Trail would pass along the west bank of the New River through most of the Middle Gorge unit, it has been included in the alternatives for completeness. Under alternative A, the National Park Service would take no action to accelerate trail completion, which could take several years.

Alternative B: Emphasis on Recreation on the River

The actions under alternative B for **Grandview Sandbar, Royal, Army Camp, Terry, and McKendree Hospital Site** would be the same as those described for alternative A; that is, there would be no significant change in use or development.

Mill Creek. The existing rough track at Mill Creek that leads from the Glade Creek road to the river's edge would be graveled and maintained, which would keep the primitive launching area accessible to vehicles. Informal camping would continue to be permitted with few restrictions; minimal parking and portable toilets would be supplied. The existing federally owned

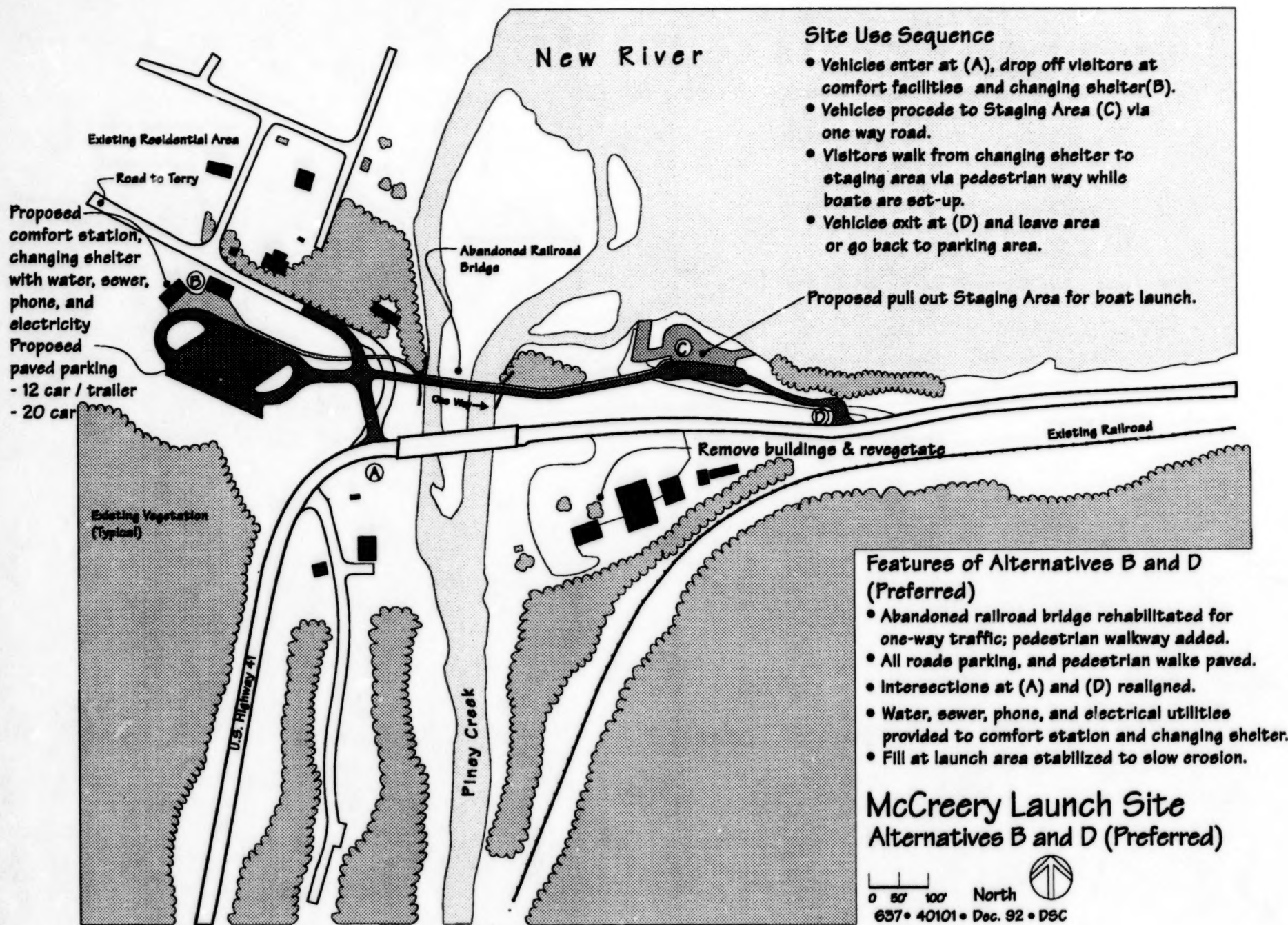
buildings, which do not appear to be eligible for the national register, would be kept or removed depending on the park's local needs.

Quinnimont. The federally owned structures at Quinnimont that are ultimately listed on the National Register of Historic Places as part of a historic district would be stabilized, maintained, and protected to diminish the likelihood of degradation. Simple fire detection and burglar alarms would be installed to decrease susceptibility to vandalism. No immediate public use would be proposed, but the buildings would be held for possible future use. Structures found not eligible, and for which there is no other use, would be dismantled and removed. The town and historic structures would not be interpreted under this alternative (also see "Compliance").

Prince Brothers' Store. Under this alternative, the Prince Brothers' Store would be demolished and removed. However, before removal, the National Park Service would undertake the studies and documentation that are legally required for a national register property. This approach is considered a viable alternative because of concerns for the safety of visitors and park staff, due to the building's location on a curve of the highway and within a few feet of its edge.

McCreery. A high-quality launch facility would be developed at McCreery for commercial and private boaters (see map: McCreery Launch Site, Alternatives B and D). Changes under this alternative would include a redesigned traffic pattern to facilitate entry of large vehicles and dropoff of boaters of boaters and equipment, a stabilized launch ramp, paved parking and driving surfaces with curbs, a changing room, a telephone, and comfort facilities served by running water, electricity, and a septic system. Private boaters would have the option of launching at McCreery or

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downstream at Terry Beach if McCreery was crowded. An appropriate structure on federal property in the area would be modified for use as a park operations and storage facility.

Terry Beach. National Park Service properties at Terry Beach would be developed to provide for launching of private boats (not commercial river trips). Included would be a small changing room, a vault toilet, and parking appropriate to the level of private boating activity. The views of current residents would be considered, and any restrictions that may apply in this privately developed area would be observed to ensure appropriate design and location of the launch area. The federally owned residences would be removed.

Thayer. To ensure access for all public users at Thayer, the Park Service would acquire and develop a public access site (with comfort station and graveled parking area) for boat launching and takeout. The federally owned church building, potentially eligible for national register status, would be stabilized and protected, including installation of simple fire detection and burglar alarms. This alternative would not include public use of the building or interpretation of the building or the town itself.

Campsites for Boater Use. Management of campsites for boater use would include identification and designation of specific sites for primitive camping by boaters in appropriate places, including Silo Rapids. The sites would be cleared, and use of undesignated sites would be prohibited. No picnic tables or fire grills would be provided, but comfort facilities appropriate to remote, infrequently maintained sites would be installed. If or when the existing privately maintained access road to Silo Rapids became federal property, it would be kept open only for administrative use or for walk-in or nonmotorized vehicle access to the river shore.

McKendree Road. Under alternative B, McKendree road would remain under state ownership, and the state would continue to have maintenance responsibility. The National Park Service would encourage the state to improve its level of maintenance. Until a consistently passable road was achieved through better maintenance, the Park Service would continue to discourage its use as a scenic drive, and there would be no other changes in the pattern of use and development.

Mary Ingles Trail. The Middle Gorge segments of the Mary Ingles Trail and other hiking trails would be completed only as funding permitted and on a schedule determined by the separate planning effort for the national river as a whole.

Alternative C: Emphasis on River Shore and Surrounding Lands

Mill Creek. At Mill Creek, the access road from the Glade Creek road would be graveled and maintained to the river's edge, where the present primitive launch site would be retained. Campsites and spur roads would be designated to control informal camping. Parking for day users would be better defined, and vault toilets would be installed. The existing federally owned structures, which do not appear to be eligible for the national register, would be kept or removed depending on the park's local needs.

Quinnimont. All federal properties in the town of Quinnimont would be stabilized and retained as part of the historic scene, regardless of whether or not they were found to be individually or collectively eligible for the national register. The history of the community, the old iron furnace, and the federally owned church would be interpreted through wayside exhibits and printed information.

Grandview Sandbar. Under alternative C, the Park Service would routinely grade and gravel the access road from Glade Creek (Royal) road to Grandview Sandbar. A day-use area and a primitive campground would be developed in the area that is now used informally for camping.

The intention for Grandview Sandbar under alternative C would be to allow traditional recreational uses to continue — simple overnight camping without utilities, daytime picnicking, bank fishing, and private boat launching — but to separate day and night users, provide picnic tables, designate parking spaces, and define spur roads and campsites. Vault toilets would be installed, but no water, sewer, or electricity would be furnished. Information on regulations and campground etiquette would be provided. Frequent ranger patrols would be arranged for seasons of heavy use. This site would not be interpreted under this alternative.

Prince Brothers' Store. If feasible, the Prince Brothers' Store would be rehabilitated and opened to the public as a museum focusing on commercial activities within the New River Gorge. A working general store also might be developed on a concession or lease basis. To assess feasibility, the National Park Service would conduct extensive study of the significance, integrity, and soundness of the building. The Park Service also would consider whether offering merchandise for sale in this location would be appropriate. For improved safety, solutions to current traffic flow and access problems would be sought through landscape design analysis. Only after satisfactory completion of these steps would a final decision be made to proceed with rehabilitation and public use.

Royal. The National Park Service would prepare a sign to identify the Royal area, and parking spaces for two or three vehicles would be provided along the road-

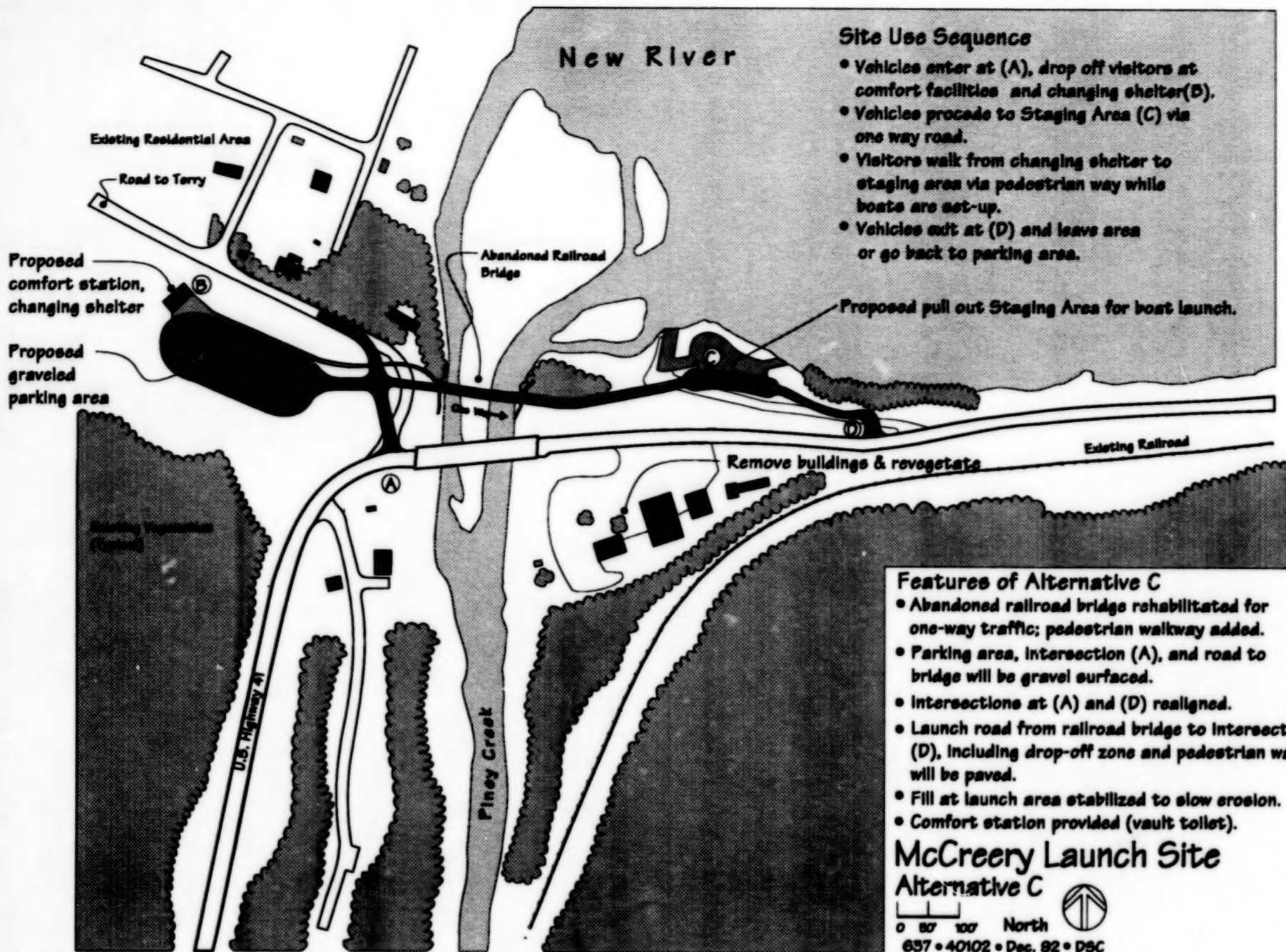
side. Stairways and trails would replace the current steep unimproved tracks to the river's edge. The old community of Royal would be interpreted in wayside exhibits.

McCreery. The intention for McCreery under alternative C would be to provide basic but adequate launch facilities to accommodate both private boaters and commercial operators (see map: McCreery Launch Site, Alternative C). The traffic pattern would be redesigned to facilitate entry of large vehicles and dropoff of boaters and equipment. Facilities would include a stabilized launch ramp, graveled parking and driving surfaces, a simple changing shelter, and vault toilets. Private boaters would share facilities with commercial operators, since no private launch facilities would be provided at Terry Beach.

Terry Beach. No public use of Terry Beach would be planned under alternative C. The two federally owned structures (formerly summer residences) would be removed.

Army Camp. The National Park Service would work with the state to improve the existing road through the private residential area in Army Camp to reduce dust and congestion and resolve other issues related to pass-through traffic. The Park Service would grade and gravel the federal portion of the access road. A day-use area and a primitive campground would be developed in the area now used informally for camping.

As at Grandview Sandbar, the intention for Army Camp in alternative C would be to allow traditional recreational uses to continue — simple overnight camping without utilities, daytime picnicking, bank fishing, and occasional private boat launching — but to separate day and night users, provide picnic tables, designate parking spaces, and define campsites and spur roads. Vault toilets would be installed, but no



ALTERNATIVES

water, sewer, or electricity would be supplied. Information on campground etiquette and regulations would be provided. Frequent ranger patrols would be arranged for seasons of heavy use. The natural and cultural history of Army Camp would be interpreted through wayside exhibits.

Terry. The actions for the privately owned small community of Terry would be the same in alternative C as in alternatives A and B; that is, no public services or access to the river are available, and no change would be made in that situation.

McKendree Hospital Site. Vegetation encroaching on the ruins at the McKendree hospital site would be cleared. Drainage for the access road would be improved, but the road's present gravel surface would remain. Parking for five cars would be provided near the ruins, and several picnic tables would be installed. Interpretation would be offered through wayside exhibits and a trail through the site. Visitors would be informed of the site's location by a roadside sign and reference in a Middle Gorge interpretive and informational brochure.

Thayer. No change would be made in access to Thayer; the present situation would continue (informal access is provided to boaters, but access for the general public is not guaranteed). The town and the federally owned church would be interpreted through wayside exhibits. The church building would be evaluated for historical value, and if found eligible for national register status, it would be stabilized and protected.

Campsites for Boater Use. Uncontrolled use of riverside campsites would continue; no campsites would be designated, and no new facilities would be added. The privately maintained road on the west side of the river, which provides access to Silo Rap-

ids, would be abandoned if it came into federal ownership.

McKendree Road. Under alternative C, the state would retain ownership of and maintenance responsibility for McKendree road. The National Park Service would work with the state to improve the shoulders and drainage and would pave the surface so that the existing right-of-way would be maintained as a one-lane paved road for low-speed two-way traffic. One-lane paving is locally referred to as "two on, two off." The road would be the same width as at present; no new cuts and fills or realignment would be done. The surface would be paved, not to raise the standard of the road to higher speed or volume, but to reduce the costs and impacts of routine maintenance associated with a graveled surface.

The intention for McKendree road in this alternative would be to ensure more reliable access for private landowners in the area and to provide a scenic low-speed driving opportunity for park visitors who would like to experience the natural and cultural resources of the Middle Gorge. The National Park Service would clear strategically located vistas to allow for views of the gorge and the river, and several roadside picnic sites would be developed with trash collection and portable toilet facilities. Wayside interpretation and a Middle Gorge interpretive and informational brochure also would be available.

Mary Ingles Trail. The portion of the Mary Ingles Trail passing through the Middle Gorge, and other spur trails, would be completed on an accelerated schedule regardless of progress in the separate trail planning effort.

Alternative D: Balanced Land and Water Activities (preferred)

Management actions under alternative D for **Terry** would be the same as in all other alternatives. Management actions for **Mary Ingles Trail** would be the same as those described for alternative B. Management actions for **Mill Creek, Royal, Terry Beach, and McKendree Hospital Site** would be the same as those described for alternative C.

Quinnimont. Treatment of federal properties at Quinnimont the same as that described for Alternative B except that simple interpretive exhibits would be installed at each structure.

Grandview Sandbar. Management of Grandview Sandbar under alternative D would be similar to that described for alternative C, but the development would be carried out in phases. In phase 1, the National Park Service would grade and gravel the access road from Glade Creek (Royal) road to Grandview Sandbar, as described earlier. This would provide easier access for continuation of the current use of the area for informal camping and day use. Phase 2, at a later time, would involve development of a day-use area and a primitive campground in that area. There would be no intention to develop a formal fee-collection campground serving all types of vehicles and providing extensive services.

The intention for Grandview Sandbar under alternative D would be the same as that described for alternative C, with the same plans for continuation of traditional uses of the area but separation of day and night users, provision of picnic tables, vault toilets, information on campground etiquette, designation of parking spaces, definition of spur roads and campsites, and arrangements for frequent ranger patrols in seasons of heavy use. As in

alternative C, interpretation would not be planned for this site.

Prince Brothers' Store. Under the preferred alternative, the Prince Brothers' store would be stabilized, maintained, and protected as part of the historic scene. It would not be immediately available for any public use, but it would be held for possible future use. Because of potential safety considerations, additional barriers would be placed around the current informal parking area to discourage parking and encourage visitors simply to drive by the structure. Vandalism and potential fire damage would be addressed by addition of simple burglar and fire detection alarms.

McCreery. Management of McCreery under alternative D would be similar to that described for alternative B and portrayed on the map showing the McCreery launch site, alternatives B and D. The only difference would be that under alternative D, private boaters would share facilities with commercial operators, since no alternate private launch facilities would be provided at Terry Beach under this alternative.

Army Camp. Management of Army Camp under alternative D would be similar to that described for Alternative C, but the development would be carried out in phases. Phase 1 would consist of working with the state to improve the road as previously described. This would allow better access to Army Camp, where informal overnight camping would continue with little regulation or site development. Phase 2, at a later time, would involve development of a day-use area and primitive campground in the area now used informally for camping. There would be no intention to develop a formal fee-collection campground serving all types of vehicles and providing extensive services.

As at Grandview Sandbar, the intention for Army Camp in alternative D would be the

same as that described for alternative C, with the same plans for installation of vault toilets, frequent ranger patrols in seasons of heavy use, provision of information on campground etiquette, and interpretation through wayside exhibits.

Thayer. To ensure public access to the river at Thayer, the National Park Service would either acquire and develop a site or negotiate a cooperative agreement with a private owner. The federally owned church would be evaluated for historical significance; if found eligible for the National Register, it would be protected, as would its interior furnishings. Simple wayside interpretation would explain the significance of the town and church.

Campsites for Boater Use. Uncontrolled use of riverside campsites would continue under alternative D. No campsites would be designated and no new sites or facilities would be added. A public education program would be developed to ensure users' careful attention to disposal of human waste and trash. Should such a program fail on a voluntary basis, mandatory practices such as carrying out all trash and human waste would be instituted. If the privately maintained road on the west side of the river, which provides access to Silo Rapids, came into federal ownership, it would be abandoned or incorporated into a foot trail along the river.

McKendree Road. The state would retain ownership and maintenance responsibility

for McKendree road under the preferred alternative. The National Park Service would work with the state to improve shoulders, drainage, and surface so that the existing right-of-way would be available and maintained as an all-weather gravel-surfaced road for two-way traffic along the existing right of way and of the same width (approximately 1½ lanes). No new cuts and fills or realignment would be done, and there would be no attempt to raise the road's standard to higher speed or volume.

The intention for the McKendree road in alternative D would be to continue necessary access for private landowners in Thayer and to provide a scenic low-speed driving opportunity for park visitors who would like to experience the natural and cultural resources of the Middle Gorge. The National Park Service would clear a small number of strategically located vistas to allow for views of the gorge and develop a few informal roadside picnic sites. Low-key interpretation would be available at simple wayside exhibits.

COMPARISON OF ALTERNATIVES, IMPACTS, AND COSTS

Tables 1, 2, and 3, on the next several pages, present side-by-side comparison of alternatives, estimated costs, and environmental consequences. The environmental consequences of each alternative are discussed in detail in a later chapter.

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TABLE 1: COMPARISON OF ALTERNATIVES

Site	Alternative A: Present Management (No Action)	Alternative B: Emphasis on Recreation on the River	Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Alternative D: Balanced Land and Water Activities (preferred)
Middle Gorge unit overall	No plan adopted; minimum legal requirements met; current activities continued.	Emphasis on traditional activities such as commercial and private white-water boating, boat-access camping and fishing.	Emphasis on recreation on land and on river shore; interpretation; preservation of natural, cultural, and scenic resources.	Provision of a variety of small-scale developments for activities on both river and land; low-key interpretation.
Mill Creek	Rough access road to river; informal camping, fishing, boat launching; uncontrolled parking; deteriorating structure and farmstead not of historical significance.	Access road graveled and maintained; launch site retained as is; informal camping continued, but minimal parking and portable toilets added; structures removed or stabilized according to local needs.	Access road graveled and maintained; launch site retained as is; campsites and spur roads designated to control camping; vault toilets added; day user parking defined; structures removed or stabilized according to local needs.	Same as alternative C.
Quinnimont	Federally owned church, iron furnace, several houses, all deteriorating; potential for vandalism; minimal patrol provided by NPS.	Federal properties in potential historic district stabilized, maintained, and protected; fire and burglar alarms installed; no interpretation.	All federal properties stabilized and retained as part of historic scene; wayside exhibits, printed information provided for interpretation of town, houses, and church.	Federal properties in potential historic district stabilized, maintained, and protected; fire and burglar alarms installed; wayside exhibits added; town history interpreted at a central location.
Grandview Sandbar	Used informally for camping, no designated sites; primitive boat launch area; poor condition access road; (high clearance vehicles); portable toilets, minimal NPS patrol, regulation, trash, sanitation services would continue.	No change from alternative A.	NPS would grade and gravel access road; day and night users separated through designation of sites for primitive camping, addition of toilets, picnic tables; parking designated, spur roads defined; primitive launch area retained; frequent ranger patrols; literature on rules and camp etiquette provided; no interpretation.	Same as alternative C but in phases: phase 1, road improvement as described; phase 2, camping, picnic, and parking changes plus spur roads.
Prince Brothers' Store	Store (listed on National Register) near busy highway, not open to public; potential for vandalism; periodic emergency repair needed; deterioration might continue.	After completion of necessary studies and documentation, structure demolished to eliminate safety hazards.	If feasible, store rehabilitated and opened as a museum and possibly a general store; to improve safety, solutions must be found for traffic flow and access problems.	No public use proposed; store stabilized, maintained, protected as part of historic scene and held for future use; barriers placed around parking area to prevent unsafe parking, discourage vandalism; fire and burglar alarms installed.

Site	Alternative A: Present Management (No Action)	Alternative B: Emphasis on Recreation on the River	Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Alternative D: Balanced Land and Water Activities (preferred)
Royal	Informal roadside parking; visitors use steep unimproved trails to river.	No change from alternative A.	Addition of identifying sign, a few parking spaces, stairs, improved trail to river; old townsite interpreted in wayside exhibits.	Same as alternative C.
McCreery	Informal boat launching; minimal sanitation facilities, parking; changes needed in traffic circulation and parking to improve safety; NPS would ask state for crosswalks, better traffic controls, lower speed limits.	High-quality launch area developed for commercial, private boaters; launch ramp stabilized; comfort station, changing room with utilities added; better traffic pattern, paved parking, curbs; if crowded, private boaters could launch at Terry Beach instead.	Basic launch facilities for private and commercial boaters with launch ramp stabilized, changing shelter and vault toilets added; no alternate launch area for private boats when crowded; traffic pattern improved; gravel parking and driving surfaces.	Similar to alternative B, but no alternate launch area for private boaters.
Terry Beach	No public facilities; federal structures and land unused.	NPS would develop launch facilities for private boats, with toilet, parking, small changing room; federal buildings removed; local residents consulted in design.	No public use; federal buildings removed.	Same as alternative C.
Army Camp	Used informally for camping, no designated sites; access road in poor condition (high clearance vehicles); access through residential area congested; minimal NPS patrol, regulation, trash, sanitation services would continue.	No change from alternative A.	NPS would work with state to improve residential access road, grade and gravel NPS part; day and night users separated through designation of primitive campsites, addition of toilets, picnic tables; parking designated; spur roads defined; frequent ranger patrols; history told in wayside exhibits; literature provided on rules, camp etiquette.	Same as alternative C but in phases: phase 1, road improvement as described; phase 2, camping, picnic, parking changes plus literature and wayside interpretation.
Terry	Privately owned; no public services or access.	No change from alternative A.	No change from alternative A.	No change from alternative A.
McKendree Hospital Site	Rough access road, foundation ruins overgrown; few visitors because area is not marked by signs.	No change from alternative A.	Vegetation cleared; access road drainage improved but gravel surface retained; parking areas, picnic sites added; sign installed to mark site; trail and interpretive wayside exhibits developed.	Same as alternative C.

Site	Alternative A: Present Management (No Action)	Alternative B: Emphasis on Recreation on the River	Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Alternative D: Balanced Land and Water Activities (preferred)
Thayer	No publicly owned facilities; public access to river not guaranteed; historical significance of church undetermined.	NPS would develop public access for boat launch and take-out; church with potential historical significance stabilized, fire and burglar alarms added; no interpretation of church or town.	Access situation unchanged; town and church interpreted through wayside exhibits; church stabilized if found eligible for National Register.	NPS would ensure public river access through acquisition of site or cooperative agreement; church with potential historical significance stabilized, fire and burglar alarms installed; simple wayside interpretation provided.
Campsites for Boater Use (as at Silo Rapids)	Uncontrolled camping at any location, no sanitary facilities; road to Silo Rapids privately maintained, public access not guaranteed.	Sites for primitive camping designated, cleared; sanitary facilities added; but no tables or grills; if Silo Rapids road became federal property, it would be used only for administrative needs, not public access.	Uncontrolled camping would continue; no facilities added; if Silo Rapids road became federal property, it would be abandoned.	Uncontrolled camping would continue, no facilities added; public education program developed to improve sanitation; Silo Rapids road abandoned if it became federal property.
McKendree Road	State ownership continued, minimum maintenance; visitors discouraged from using road.	State ownership continued, NPS would encourage state to improve maintenance; no other change in use or development in corridor.	State ownership continued, NPS would work with state to improve drainage, shoulders; one lane paved for two-way low-speed traffic; vistas cleared; picnic sites, portable toilets added; wayside exhibits, brochures developed.	State ownership continued, NPS would work with state to improve shoulders, drainage; all-weather gravel surface for scenic two-way route without widening; limited vista clearing, a few picnic sites and simple wayside exhibits.
Mary Ingles Trail and other hiking trails	Trails in this unit completed subject to funding availability, on a schedule determined in a separate trail planning effort.	Same as alternative A.	Accelerated completion of Middle Gorge trails regardless of progress in separate trail planning effort.	Same as alternative A.

TABLE 2: COMPARISON OF ENVIRONMENTAL CONSEQUENCES OF THE ALTERNATIVES

Site	Effects of Alternative A: Present Management (No Action)	Effects of Alternative B: Emphasis on Recreation on the River	Effects of Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Effects of Alternative D: Balanced Land and Water Activities (preferred)
Middle Gorge unit overall				
Natural Resources	Continuation of some erosion and impacts on riparian vegetation; no construction impacts.	Continuation of some erosion and impacts on riparian habitat; some short-term effects from construction.	Improved erosion control and reduced disturbance of riparian habitat; some short-term effects from construction.	Same as alternative C.
Cultural Resources	No additional impacts.	Impacts reduced by preconstruction surveys; some structures might be removed and their direct value lost.	Same as alternative B.	Same as alternative B.
Mill Creek				
Natural Resources	Continued erosion along access road and disturbance of riparian habitat by vehicles.	Same as alternative A.	Improved erosion control; reduced disturbance of riparian habitat.	Same as alternative C.
Cultural Resources	No additional impacts.	Only indirect value would remain if structure removed.	Same as alternative B.	Same as alternative B.
Quinnimont				
Natural Resources	No additional impacts.	No additional impacts.	No additional impacts.	No additional impacts.
Cultural Resources	No additional impacts.	Indefinite protection through stabilization; potential for vandalism and fire partially mitigated by alarm systems.	Same as alternative B.	Same as alternative B.
Grandview Sandbar				
Natural Resources	Continued erosion along access road and disturbance of riparian habitat by vehicles.	Same as alternative A.	Improved erosion control; reduced disturbance of riparian habitat.	Same as alternative C.
Cultural Resources	No additional impacts.	No adverse effects expected; survey required.	Same as alternative B.	Same as alternative B.

Site	Effects of Alternative A: Present Management (No Action)	Effects of Alternative B: Emphasis on Recreation on the River	Effects of Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Effects of Alternative D: Balanced Land and Water Activities (preferred)
Prince Brothers' Store				
Natural Resources	No additional impacts.	No additional impacts.	No additional impacts.	No additional impacts.
Cultural Resources	No additional impacts.	Only an indirect value would remain if building removed; current national register status means extensive documentation required before removal.	Some protection through stabilization, but potential for vandalism would continue; rehabilitation and adaptive use would improve protection and reduce vandalism.	Indefinite protection through stabilization; potential for vandalism and fire partially mitigated by alarm systems.
Royal				
Natural Resources	Vegetation, soils, and water quality degraded by informal trails.	Same as alternative A.	Improved erosion control.	Same as alternative C.
Cultural Resources	No additional impacts.	No additional impacts.	Potential for adverse impacts with increased use.	Same as alternative C.
McCreery				
Natural Resources	Continued erosion of launch area, water quality degraded.	Some development in floodplain; improved erosion control; disturbance of 3½ acres previously disturbed; possible adverse effects on wetlands.	Same as alternative B.	Same as alternative B.
Cultural Resources	No additional impacts.	No adverse effects expected; survey required.	Same as alternative B.	Same as alternative B.
Terry Beach				
Natural Resources	No additional impacts.	Developments in floodplain; effects on water quality.	No additional impacts.	No additional impacts.
Cultural Resources	No additional impacts.	No adverse effects expected; survey required.	Same as alternative B.	Same as alternative B.

Site	Effects of Alternative A: Present Management (No Action)	Effects of Alternative B: Emphasis on Recreation on the River	Effects of Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Effects of Alternative D: Balanced Land and Water Activities (preferred)
Army Camp				
Natural Resources	Continued erosion along access road and disturbance of riparian habitat.	Same as alternative A.	Improved erosion control, reduced disturbance of riparian habitat, but potential effects on rare plant; potential for hazardous waste.	Same as alternative C.
Cultural Resources	No additional impacts.	Potential for adverse effects on undocumented resources.	Survey required since existence of undocumented resources possible.	Same as alternative C.
Terry				
Natural Resources	No additional impacts.	No additional impacts.	No additional impacts.	No additional impacts.
Cultural Resources	No additional impacts.	No additional impacts.	No additional impacts.	No additional impacts.
McKendree Hospital Site				
Natural Resources	Continued erosion along access road and disturbance of riparian habitat by vehicles.	Same as alternative A.	Erosion control improved; 1 acre vegetation disturbance; possible endangered plant, wetland may be present.	Same as alternative C.
Cultural Resources	No additional impacts.	Same as alternative A.	No adverse effects expected; survey required; concern for vandalism with increased use.	Same as alternative C.
Thayer				
Natural Resources	No additional impacts.	Developments within floodplain so design consideration of possible flooding required; potential effects on endangered plant.	No additional impacts.	Same as alternative B.
Cultural Resources	No additional impacts.	No adverse effects at launch site expected; predevelopment survey required; structure protected indefinitely; potential for vandalism and fire partially mitigated by alarm systems.	Structure protected indefinitely; potential for vandalism and fire partially mitigated by alarm systems.	Same as alternative B.

Site	Effects of Alternative A: Present Management (No Action)	Effects of Alternative B: Emphasis on Recreation on the River	Effects of Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Effects of Alternative D: Balanced Land and Water Activities (preferred)
Campsites for Boater Use (as at Silo Rapids)				
Natural Resources	Trash, human waste would continue to wash into river.	Improved control of trash, human waste, but riparian habitats cleared.	Same as alternative A.	Improved control of trash, human waste; no further clearing of riparian habitat.
Cultural Resources	No additional impacts.	No adverse effects expected; survey required.	No additional impacts.	No additional impacts.
McKendree Road				
Natural Resources	Continued erosion due to poor drainage.	Same as alternative A.	Better erosion control with improved shoulders and pavement; short-term pollution by fresh asphalt; some roadside vegetation lost through shoulder work and vista clearing.	Better erosion control with improved shoulders; periodic sedimentation increase with repeated grading; some roadside vegetation lost through shoulder work and vista clearing.
Cultural Resources	No additional impacts.	No additional impacts.	No adverse effects expected; survey required.	Same as alternative C.
Mary Ingles Trail and other hiking trails				
Natural Resources	Degradation of vegetation and soils until trails built.	Same as alternative A.	Trail construction might cause short-term erosion and wildlife disturbance, but long-term decrease in degradation of soils and vegetation caused by informal trails.	Same as alternative A.
Cultural Resources	No additional impacts until trails built.	Same as alternative A.	Potential for disturbance of historic or prehistoric resources depends on trail route; surveys required.	Same as alternative A.

TABLE 3: COST ESTIMATES FOR THE ALTERNATIVES

Site	Alternative A: Present Management (No Action)	Alternative B: Emphasis on Recreation on the River	Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Alternative D: Balanced Land and Water Activities (preferred)
Middle Gorge Unit overall	No plan adopted; costs not predictable because actions taken only in re- sponse to future needs.	Emphasis on traditional activities like boat fishing, commercial and private white-water boating, boat-access camping.	Emphasis on recreation on riv- er shore and land; interpreta- tion; preservation of natural, cultural, and scenic resources.	Provision of a variety of small-scale developments for activities on both river and land; low-key interpretation.
Grand totals				
Gross construction		\$2,053,350	\$2,555,800	2,132,700
Advance planning		389,000	488,000	407,300
Alt. Grand Total	(unpredictable)	\$2,442,350	\$3,043,800	\$2,540,000 ¹
Mill Creek				
Gross construction	—	52,400	85,150	Same as alternative C
Advance planning	—	10,000	16,250	
Total	—	\$62,400	\$101,400	
Quinnimont				
Gross construction	—	376,000	Same as alternative B ²	Same as alternative B
Advance planning	—	72,000		
Total	—	\$448,000		
Grandview Sandbar				
Gross construction	—	—	163,750	Ph. 1: 65,550; Ph. 2: 98,250
Advance planning	—	—	31,250	Ph. 1: 12,500; Ph. 2: 18,750
Total	—	—	\$195,000	\$195,050
Prince Brothers' Store				
Gross construction	—	17,500	917,000	114,000
Advance planning	—	-0-	175,000	21,800
Total	—	\$17,500	\$1,092,000	\$135,800

Site	Alternative A: Present Management (No Action)	Alternative B: Emphasis on Recreation on the River	Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Alternative D: Balanced Land and Water Activities (preferred)
Royal				
Gross construction	—	—	13,100	Same as alternative C
Advance planning	—	—	2,500	
Total	—	—	\$15,600	
McCreery				
Gross construction	—	1,038,800	622,250	1,038,800
Advance planning	—	198,250	118,750	198,250
Total	—	\$1,237,050	\$741,000	\$1,237,050
Terry Beach				
Gross construction	—	216,150	26,200	Same as alternative C
Advance planning	—	41,250	5,000	
Total	—	\$257,400	\$31,200	
Army Camp				
Gross construction	—	—	203,050	Ph. 1: 131,000; Ph. 2: 72,050
Advance planning	—	—	38,750	Ph. 1: 25,000; Ph. 2: 13,750
Total	—	—	\$241,800	\$241,800
Terry	—	—	—	—
McKendree Hospital site				
Gross construction	—	—	43,000	Same as alternative C
Advance planning	—	—	8,200	
Total	—	—	\$51,200	
Thayer				
Gross construction	—	156,000	46,000	Same as alternative C
Advance planning	—	30,000	8,800	
Total	—	\$186,000	\$54,800	
Campsites for Boater Use (as at Silo Rapids)				
Gross construction	—	196,500	—	—
Advance planning	—	37,500	—	—
Total	—	\$234,000	—	—

Site	Alternative A: Present Management (No Action)	Alternative B: Emphasis on Recreation on the River	Alternative C: Emphasis on Activities on River Shore and Surrounding Lands	Alternative D: Balanced Land and Water Activities (preferred)
McKendree Road				
Gross construction	—	—	60,300	23,600
Advance planning	—	—	11,500	4,500
Total ³	—	—	\$71,800	\$28,100
Mary Ingles Trail	Trail development funded separately; no expenditures under this plan, regardless of alternative selected.			

1.

Does not include interpretive development; \$216,300 should be added to this estimate to learn get total estimated cost (see table 4).

2.

Since the exact composition of the potential district has not yet been determined, to estimate costs it is assumed that *all* federal structures would be included. If so, then costs would be the same as those listed for alternative B.

3.

Does not include costs for road improvements.

INTERPRETIVE PROSPECTUS FOR THE PREFERRED ALTERNATIVE

The National Park Service prepares a number of documents in analyzing and planning programs for information and interpretation of NPS areas. The first in that sequence, the interpretive plan, has already been produced for New River Gorge National River. The *New River Gorge Interpretive Plan* dealt with the national river as a whole and identified the major themes that will be interpreted (see list in the "Purpose and Need" chapter). The next step, in this interpretive prospectus, is to decide on specific locations in the Middle Gorge where the themes can best be addressed, select topics to be interpreted, and recommend appropriate media (signs, brochures, guided or unguided trails, exhibits, films, slide programs).

The Middle Gorge presents a number of opportunities to address the primary interpretive themes. For example, the recreational sites that are to be developed will require placement of directional and informational signs to help visitors select the desired destination. On arrival, visitors will need additional information to guide them to safe and enjoyable activities in line with necessary regulations.

The existence of a passable road through the gorge in this unit presents many opportunities to interpret natural diversity in the context of a much-altered landscape slowly healing from extensive impacts of earlier logging and mining.

The small rural communities in this unit played crucial roles in America's rapid industrialization by providing raw resources (coal for energy and timber for construction).

For alternative D, the preferred alternative, the following specific interpretive and informational development is proposed.

Media Choice in General

Many visitors to the Middle Gorge — private rafters, fishermen, campers, and hikers — will encounter the area's resources without the personal services of trained park interpreters. This suggests that effective interpretation will have to involve signs, maps, brochures and self-guided trails to be used independently by visitors. Similarly, the large number of visitors participating in commercial white-water rafting generally will not see a park interpreter and may need access to static signs or exhibits. However, these visitors are typically under the direction of private river guides who provide information primarily on safety and conduct on board the rafts. This personal service contact provides additional opportunities to provide expanded interpretation beyond the safety message.

Production of interpretive materials such as signs, exhibits, and brochures would be largely the responsibility of the National Park Service. Trail guides and longer publications on cultural or natural history typically would be produced in conjunction with private cooperating associations that underwrite publication costs and are responsible for sales.

Short-term and Longer-term Development

Realistically, all the development that would take place under the preferred alternative would not occur immediately. The likely sequence would be (a) physical improvements to launching facilities and primitive campgrounds, and (b) development of cultural properties and the scenic drive. To accommodate this sequence, interpretive development would take place in at least two phases.

Phase 1. Wayside exhibits (on-site signs incorporating text, maps, drawings or photos) focusing on river safety would be placed at Mill Creek, Grandview Sandbar, Royal, McCreery, and Army Camp. The signs might be generic and designed for use at all access or riverside camping areas within the New River Gorge National River. Generic signs are often more practical in areas of high use and potential for vandalism, since they are easier to replace than site-specific signs.

At McCreery, where the highest density of use would be expected because of commercial and private raft launching, and where travelers along West Virginia Highway 41 are likely to need information, a more extensive orientation exhibit would be provided in addition to the generic safety-oriented wayside display. The orientation exhibit, perhaps similar to the existing kiosk at the new New River Gorge visitor center at Canyon Rim, would provide needed orientation to opportunities for visitor experiences in the Middle Gorge and other New River Gorge units.

To take better advantage of the contact of commercial river guides with visitors, efforts would be increased to provide guides with accurate information beyond the primary safety theme. For example, natural and cultural history orientation should be provided, along with instruction on how to share this information with visitors so that they may depart with a better understanding of and appreciation for park resources.

Phase 2. As further research leads to firm decisions on the treatment and development at other Middle Gorge sites, the following information or interpretive developments would be proposed.

Mill Creek — A short self-guided interpretive trail, focusing on the natural history of the riverside ecosystem, would begin with an initial wayside exhibit and incor-

porate a written trail guide. Interpretation of the farmstead would be based on the results of evaluation of its historical significance.

Quinnimont and Prince — Somewhere in the two small communities of Quinnimont and Prince, there should be interpretation of the significance of the area as the first to ship New River coal and the only riverside site of iron smelting. Subject to mutual agreement, a small exhibit on this and other community history could be placed in the Amtrak train station in Prince, which serves occasional passenger train traffic and organized Amtrak tours. Strategically located on WV 41, the station has ample parking and could offer information to both rail and road visitors. The unique history and architectural style of the station itself also should be interpreted. If the Amtrak Station is not available, an outdoor site near the post office in Quinnimont would be considered, although this would require mutual agreement with a private owner.

During the period that Quinnimont structures were being protected and held for future use, simple wayside exhibits interpreting their relationship to local history would be installed.

Prince Brothers' Store — Safety considerations at the Prince Brothers' Store will preclude any immediate public use, including even stopping to observe the store from the outside. No on-site interpretive exhibits would be provided until some safe future use could be developed. The story of the store would be dealt with in written materials such as the McKendree Road brochure and exhibits at the Amtrak Station.

Royal — A wayside exhibit at the proposed pull-off parking area would briefly present the history of Royal.

Army Camp — A wayside exhibit would be appropriate to interpret the use of the Army Camp site by the U.S. military during World War II.

McKendree Hospital Site — In addition to signs directing visitors to the actual site of McKendree Hospital, there would need to be either a series of wayside exhibits along, or a published guide keyed to, a short interpretive trail. Topics that would be interpreted are a history of the hospital itself, the nurses' training school and its impact on the surrounding communities, and the history of the tiny community of McKendree along the railroad tracks.

McKendree Road — When overlooks or viewpoints eventually have been identified and developed, the National Park Service would provide individual wayside exhibits interpreting natural or cultural history

themes present in that view or area. Alternatively, a more general brochure or an audio cassette dealing with the scenic road could be produced; this would offer an opportunity for messages on landscapes and history as well as specific sites along the road. Information could be included on mining activities, the sand shipment ruins, and the towns of Thayer, Prince, and Quinnimont.

Cost Estimates

Cost estimates for the interpretive development proposed are presented in table 4. Note that this estimate is *not* included in table 3, which contains general cost estimates for all alternatives. For the most complete estimates of the cost of alternative D, the preferred alternative, the totals in table 4 should be added.

TABLE 4: COST ESTIMATES FOR INTERPRETIVE DEVELOPMENT, ALTERNATIVE D

Development Item	Planning and Design	Production
Phase 1		
5 River safety wayside exhibits	\$ 1,500	\$ 12,700
1 Orientation exhibit at McCreery kiosk	2,300	6,700
Construction of McCreery kiosk	7,500	30,000
Subtotal	11,300	49,400
Phase 2		
Exhibit at Amtrak station	23,000	45,000
Wayside exhibits: Army Camp	1,500	5,200
McKendree Hospital site	6,000	21,000
Royal	1,500	5,200
Mill Creek trail	1,500	5,200
Mill Creek trail guide	Cooperating association	Cooperating association
McKendree Road guide	Cooperating association	Cooperating association
Subtotal	33,500	81,600
Possible future development		
5 Quinnimont wayside exhibits	7,500	26,300
Mill Creek farm wayside exhibit	1,500	5,200
Subtotal	9,000	31,500
Grand total	53,800	162,500
Total, both categories		216,300

DESCRIPTION OF THE ENVIRONMENT

LANDOWNERSHIP/ EXISTING DEVELOPMENT

The Middle Gorge Unit is approximately 19 river miles long from the tributary of Mill Creek to just past Thurmond. This unit has approximately 30,000 acres, 95% of which are federally owned. With only a few exceptions, the federal government has not purchased small developed or undeveloped parcels within existing communities.

With few exceptions, lands on which development might take place under any of the alternatives are already in federal ownership. At McCreery, a portion of the shores of Piney Creek that support the abutments of the old railroad bridge is nonfederal, but a negotiation to purchase this land is underway.

Roads

Access to the Middle Gorge unit is by way of two roads owned and maintained by the state. West Virginia Route 41 is a paved two-lane road 24 feet wide that runs east and west in the southern part of the unit, and WV 25 is a paved two-lane, 20-foot road that connects Glen Jean to Thurmond. Both routes are in good condition. A new asphalt overlay was applied to WV 25 in 1989. There is some discussion of widening WV 25 in this section in anticipation of increasing visitor use of the Thurmond development.

McKendree road, a continuation of WV 25, 13 miles long and 20 feet wide, is an improved gravel road owned and maintained by the state. It runs north and south along the east bank of the New River (river right) from Thurmond to WV 41. Its condition from Thurmond to Thayer is basically sound, but it lacks adequate drainage and

has some shoulder failure, and its gravel surface is typically potholed. From Thayer south to WV 41 it is somewhat narrower and rougher, and additional shoulder failures are apparent. High clearance or 4WD vehicles are recommended, especially during wet weather, and small landslides are fairly common.

The Stone Cliff bridge is owned and maintained by the state. It needs to be rehabilitated. The Federal Highway Administration and the West Virginia Department of Highways estimated the cost of rehabilitation at \$2.3 million in a 1988 engineering study. The deck and five truss members would have to be replaced to meet current standards. No state proposals to do this work are active at this time.

The state of West Virginia owns and maintains the 7-mile long gravel-surfaced spur road from WV 41 westward toward Army Camp, which is 18–20 feet wide. The road provides access to private residences in that area. The remaining ½ mile of unimproved road to Army Camp, which is on federal land, is the responsibility of the National Park Service.

The National Park Service owns and maintains the road to Royal, Mill Creek, and onward to Glade Creek, a two-way, 20-foot wide graveled all-weather road open to passenger vehicles. Major surface shaping and graveling was completed in 1991.

Settlements and Visitor Use Sites

Mill Creek. The federally owned and managed Mill Creek site contains an informal parking area, a river launch, and an unoccupied deteriorating structure. The ¼-mile access road is an unimproved gravel road leading off the Glade Creek road.

Quinnimont. A privately owned unincorporated residential community surrounded by federal land, Quinnimont has a U.S. post office. The federal government owns several structures in the area, most of which are vacant and deteriorating and have been targets of vandalism.

Grandview Sandbar. Federally owned Grandview Sandbar is used for informal day use, overnight camping, swimming, and fishing. Small boats are occasionally launched here to gain access to good fishing in the quiet waters downstream to McCreery. The National Park Service supplies portable toilet and trash facilities. The ¼-mile access road to the site from Glade Creek (Royal) road is rather steep but in good condition following graveling and grading in 1992.

Prince Brothers' Store. The federally owned Prince Brothers' Store, a national register property, once was a privately owned general store and post office. The federal government also owns an adjacent lot in the unincorporated town of Prince. The building, which is not open for public use, is adjacent to West Virginia Highway 41. The front of the building is only 4 feet off the edge of road, which would be a potentially unsafe situation if the structure were open to the public. The site is on a curve, resulting in potentially hazardous short sight distances for vehicles leaving and entering the adjacent parking area.

Royal. A site where a town once stood, Royal now exists only as a few scattered foundation walls among secondary timber growth. All federally owned, it is used as a river access point for bank fishing. There is informal parking along the Glade Creek road with steep, informal trails leading to the river.

McCreery. The McCreery area, at the junction of Piney Creek and the New River, contains both privately owned and fed-

erally owned properties. An informal boat launch is used by both private and commercial boaters. The National Park Service provides minimal sanitation and trash facilities. Potential safety problems result from frequent congestion during commercial boat launching, lack of formal designated parking, and proximity to WV 41.

Terry Beach. A small unincorporated area of privately owned residences along the river's edge, Terry Beach is approximately ½ mile west of McCreery along the road that leads to Terry. The federal government owns several lots in this area, two of which are directly on the river's edge. No public facilities are provided.

Army Camp. The National Park Service owns Army Camp, an informal overnight camping area offering unimproved access to the river for boating and fishing. The National Park Service provides portable toilet and trash facilities. Access is by way of a partially paved road. The narrow, congested road leads through a small area of privately owned residences.

Terry. A small, unincorporated settlement of private residences, Terry is easily accessible by a state-maintained 1-mile gravelled road from the McCreery site on WV 41. The maintained road ends in Terry. An unmaintained four-wheel-drive track that led farther north along the west bank of the river for about 2 miles has been closed by a landslide for several years.

McKendree Hospital Site. All that remains of the McKendree Hospital, a medical facility that served mining communities in the gorge of the New River, are foundations of the structures and water system, much overgrown by trees. Visitors reach the site, all federally owned, by driving along McKendree road, then taking a rough, unmarked ¼-mile spur road that leads toward the river. No interpretation is provided.

Thayer. A small, unincorporated residential settlement, Thayer has no local government or commercial facilities. The only federally owned property in Thayer is the former Methodist Episcopal Church. Because of its location about midway between McCreery and Thurmond, Thayer has become a takeout site for certain river trips, especially at low water levels.

Campsites for Boater Use. At present, boaters take lunch breaks and camp overnight at undesignated sites along the bank of the New River. The Silo Rapids area is one such undesignated site; there are several others. Current practices allow boaters to be self-policing in the use of the areas. Commercial outfitters that schedule overnight trips voluntarily carry out trash and human waste.

Trails

The Middle Gorge planning unit contains one formally designated hiking trail: the **Thurmond-Minden Trail**. A number of additional trails are being considered as a part of the national river's trail plan, including the **Mary Ingles Trail**, a proposed long-distance through trail that would commemorate a historic escape route of an early settler in the New River area (NPS 1989c). The specific route of the Mary Ingles Trail in the Middle Gorge unit has not been determined, but it would lie on the west bank (river left), probably high above the river, allowing views down into the gorge. The trail would descend to river level at McCreery.

Various spur trails also are being considered, including one right along the river on river left, following existing four-wheel-drive tracks or abandoned trails. Short loop trails have been suggested at the McKendree Hospital site and Stretcher Neck.

NATURAL RESOURCES

A number of natural resource issues have been identified in relation to development in the Middle Gorge unit of the New River Gorge National River, and the potential for affecting threatened, endangered, or rare plant or animal species and floodplains and wetlands has been examined. These subjects, along with water quality, are discussed first in this chapter because of their importance in the "Environmental Consequences" chapter. Other natural resources are described to present a balanced view of the unit, but because they would not be directly affected by any of the alternatives, those resources are not discussed further.

Rare, Threatened, or Endangered Species

Animals. No comprehensive surveys of the Middle Gorge have been done for habitat containing threatened or endangered species. However, the unit is within the range of several species listed as threatened or endangered by the U.S. Fish and Wildlife Service (USFWS), including the Peregrine Falcon (*Falco peregrinus*), the Indiana bat (*Myotis sodalis*) and the Virginia big-eared bat (*Plecotus townsendii virginianus*). In addition, in a study completed by the National Park Service and the West Virginia Department of Natural Resources in 1987, 14 mine portals within the New River Gorge National River were found to be suitable habitat for bats and other species listed as category 2 candidates for listing as threatened or endangered (*Federal Register*, vol. 50, no. 181). These species could potentially be found in the Middle Gorge unit.

Amphibians also occur in the national river area, including several species of salamander (blackbellied and green) that are rare in West Virginia. There is also the

potential for freshwater mussels and the eastern river cooter turtle, which are species of state concern.

Plants. The state of West Virginia does not maintain an officially designated list of rare or endangered species; however, a list of species of special concern is maintained by the West Virginia Natural Heritage Program. A "Rare Vascular Plant Survey" completed by the natural heritage program in 1986 lists species of both federal and state concern. The conclusion in that survey was that no unique habitats are found in the Middle Gorge. However, two rare plant species are found in the unit: Steel's meadowrue (*Thalictrum steeleanum*) and mountain bittercress (*Cardamine clematidis*). The presence of Steele's meadowrue has been documented east of Terry, north of Thayer, and along Stretcher Neck. The USFWS is considering this species for federal listing. Mountain bittercress occurs around the Stonecliff area, Army Camp, Stretcher Neck North, and Terry East, according to the 1986 survey. This species is not listed by the USFWS as endangered, threatened, or under review.

The "Resource Inventory and Analysis," prepared in 1989 by the Denver Service Center, National Park Service, notes that running buffalo clover (*Trifolium stoloniferum*), a federally listed endangered species, has been found near the McKendree Hospital site.

Hydrology, Floodplains, and Wetlands

The flow of the New River, including the Middle Gorge, is controlled primarily by the Bluestone Dam, which is just upstream from Hinton. Since construction of the dam, the 100-year peak discharge of the New River has decreased from more than 150,000 cubic feet per second (cfs) to about 107,000 cfs, according to the U.S.

Geological Survey (USGS). Records from the gage at Hinton show an average annual flow of 7,865 cfs and a high average peak flow of 55,600 cfs.

The 1988 legislation that authorized the Gauley River National Recreation Area contains provisions for regulation of releases from the Bluestone Dam to protect and enhance downstream biological resources and recreational uses. The legislation also directs that the National Park Service, in cooperation with the U.S. Army Corps of Engineers, further study the feasibility of adjusting water releases from the dam to augment periods of low flow.

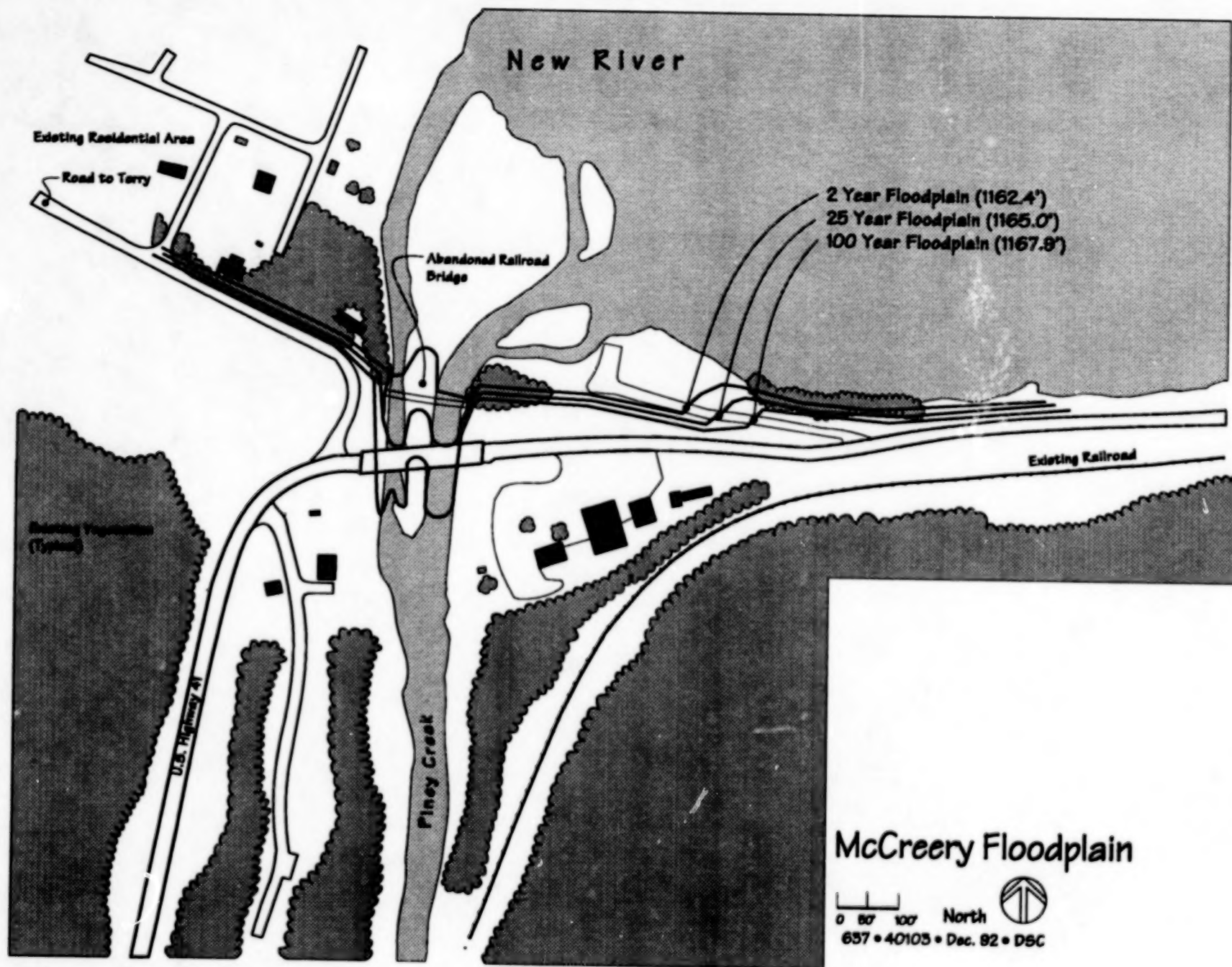
In 1991, the USGS completed a draft report for the National Park Service entitled "Flood Investigation of the New River in the New River Gorge National River, West Virginia" (GS, USDI 1991). That report provides flood profiles for the 2-, 25- and 100-year flood events (see the McCreery Floodplain map). The relationship of the various alternatives to the floodplain are discussed in the "Environmental Consequences" section of this document.

No comprehensive wetland surveys have been completed in the New River Gorge National River, but one wetland has been identified in the Glade Creek area. Until a survey is completed in the Middle Gorge unit, the presence of other wetlands should not be ruled out. A number of riparian areas at Army Camp, McCreery, Mill Creek, and Grandview Sandbar may possess the vegetation, hydric soils, and hydrologic characteristics for designation under the federal criteria for wetlands.

Water Quality

Water quality in the New River is classified as suitable for human contact such as swimming and boating, for fishing, and for agricultural and industrial uses. However,

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nonpoint pollution from erosion and uncontrolled runoff is a problem, especially during high volume discharge. Fecal coliform counts are high on occasion, and untreated sewage discharges from residential development occur throughout the unit. However, the "suitable" classification is still possible because of dilution from the large volume and river flow. Iron and sulfate originating from coal seams and abandoned mine workings also are affecting the overall water quality (NPS 1989b). Groundwater quality varies from good to poor; groundwater is subject to contamination from untreated sewage and dissolved substances leached from aquifers.

Geology, Topography, and Soils

The New River is significant because it is the only stream that flows northwestward across the Appalachians and is believed to be the oldest river on the North American continent. The present-day New River was the main headwaters of an ancient watercourse known as the Teays River. Although millions of years have passed, the waterway still flows in its original channel.

The geology of the Middle Gorge unit consists primarily of sedimentary formations deposited during the Mississippian and Pennsylvanian periods of the Paleozoic era. The Hinton and Bluestone formations comprise the shales and siltstones found in the unit. Coal-bearing sediments are also present throughout the unit.

The topography of the Middle Gorge is characterized by deeply incised tributaries and mountainous terrain with average slopes of 50% to 60%. The depth of the Middle Gorge ranges from more than 1,400 feet at Grandview State Park to approximately 600 feet at Thurmond. The average drop in elevation, as measured along the river, is 12 feet per mile through the unit.

Soils in the unit are moderately deep silty or sandy loams, usually well drained. The valley bottom and lower slopes are dominated by Calvin-Gilpin soils, which are moderately fertile and well suited to forest growth but have severe engineering limitations because of erosion potential. Upper slopes and ridgetops contain Rockland-Dekalb-Gilpin soils, which have similar limitations. Areas at the water edge, including Army Camp and McCreery, are composed of alluvium washed from weathered shales, siltstone, and sandstone. These areas are subject to severe flooding, and alternating drought and flooded conditions limit their use for development.

Vegetation

As elsewhere, climate, soils, and topography largely determine the types of vegetation of the Middle Gorge unit. Substantial annual precipitation (more than 43 inches), relatively mild winters (temperatures above freezing), a variety of soil types, and topographic diversity have led to an unusually varied flora; more than 1,067 plant species have been identified in the entire national river area.

Although the entire region was extensively harvested for timber, a second-growth forest has returned to the Middle Gorge. It is dominated by a great variety of hardwood trees: red and white oaks, tulip poplar, basswood, sugar maple, buckeye, and hemlock. Riparian areas at Army Camp and Grandview Sandbar contain elm, silver and red maple, and white ash. Understory trees and shrubs include dogwood, magnolia, and rhododendron.

Wildlife

In addition to containing natural habitat for wildlife (as discussed under "Rare, Threatened, and Endangered Species"), New

River Gorge supports a number of fish species. In a 1980 biological survey, 58 fish species were identified in the river, including game fish populations of largemouth and smallmouth bass, catfish, muskellunge, walleye, and trout. The New River is the most important warm-water stream fishery in West Virginia. Because the tributaries in the New River basin cannot support a fishery, the state stocks adult trout in selected tributaries throughout the New River Gorge, including Dunlop Creek, which is located in the Middle Gorge unit. The program consists of put-and-take stockings of adult brook trout, rainbow trout, and some brown trout in streams that will support trout for most of the spring and summer.

Scenic Resources

The Middle Gorge unit is classified as "rustic" in the *Resource Inventory and Analysis* for the national river that was prepared by the National Park Service (NPS 1989b). The scenic characteristics of the Middle Gorge are primarily natural landforms with clusters of residential and abandoned town and industrial sites.

The main scenic attraction is the gorge itself: rugged, forested, and much recovered from earlier impacts of logging and mining. Unlike some other parts of the national river, where the course of the river is seen dramatically from the gorge rim above, the Middle Gorge offers a more intimate visual experience. Here, visitors can have a feeling of being on and near the river, of being in a hardwood forest. A tour along McKendree Road is the heart of that experience: some stretches of the road parallel the river very close to the shore or on nearby slopes; others leave the gorge to meander up tributary valleys.

Travelers along McKendree Road and WV 41 can see small towns, abandoned mine

sites, and historic buildings. Although much reduced in size from earlier days, the small communities and historic resources still exhibit the architectural style and flavor of the 1800s and 1900s, so that it is not difficult to imagine earlier, busier times in these towns, these mines, even earlier trains running on the modern-day railroad.

CULTURAL RESOURCES

Middle Gorge Unit Overall

The Middle Gorge unit contains a number of historic resources representing themes that have predominated throughout the development of the New River. Most notably, coal mining played a significant role in shaping the character of the area from the last quarter of the 19th century to the mid-20th century. New River "smokeless" coal became a valuable and widely marketed commodity; its clean-burning qualities satisfied far-ranging demands for heating fuel, coke for steel production, and fuel to power steam locomotives and ships. Pervasive evidence of the area's coal mining heritage are remnants of mining and processing facilities and company towns — those that survived mine closures to persist as small communities as well as abandoned sites that have been reduced to foundation remains.

Similarly, the railroad, never far from sight or earshot, provides another historical link to the last century. Today's CSX Railroad is successor to the Chesapeake and Ohio that pioneered a tortuous route along the narrow bench above the river. Completed in 1873, the C&O made it economically feasible to exploit the rich coal and timber resources of the gorge that had previously eluded serious development.

Although coal mining and the railroad were dominant historical forces throughout the New River Gorge, sites in other planning

units already have been identified as offering the best opportunities for interpreting these themes. For instance, substantial development is proposed at Thurmond and Kaymoor to illustrate the themes of railroading and mining, respectively. Resources in the Middle Gorge unit do not appear to present opportunities for intensive development or interpretation of a theme of either railroading or mining. However, sites in the Middle Gorge like Prince Brothers' Store and Quinnimont illustrate themes such as private commercial enterprise and a typical residential settlement, respectively, that cannot be shown elsewhere. The Middle Gorge sites do contribute to a general understanding of the process and extent of industrialization and human activity, in this way providing a counterpoint to sites like Thurmond.

Specific Sites

Mill Creek. Little information is available about the historical or architectural significance of an abandoned farmstead near the confluence of Mill Creek and New River. Research needs to be conducted before any actions are undertaken that could affect the structure.

Quinnimont. The site of Quinnimont was settled as early as 1827 by Jacob Smith, who reportedly subsisted by hunting and fishing. In 1870, the Charter Oak and Iron Company established an iron furnace at the site, producing common pig iron. This is considered the first industry to have been started in the New River Gorge. Operations were unsuccessful and ceased after three years (some sources indicate that operations lasted into the 1880s). The deteriorated stone remains of the furnace are located near the Quinnimont rail yard.

The town of Quinnimont was established in 1873 upon organization of the Quinnimont Charter Oak Coal and Iron Company

by pioneer coal operator Col. Joseph L. Beury. Beury is credited with having opened the first coal mines in the gorge of the New River at Quinnimont and having made the first coal shipment over the newly completed C&O railroad. A large stone monument erected in his honor by other coal operators stands in the town.

Quinnimont became a bustling railroad center where trains serving the numerous mines and communities along the Laurel Creek and Piney branches of the C&O were switched to the main line. As early as 1879, annual coal output from the Quinnimont mines was placed at nearly 50,000 tons. Coke production at that time was nearly 27,000 tons, with 100 coke ovens reportedly in operation in 1880. Several lumber and sawmill operations also were underway.

By 1910 the town's population had grown to 400 with a union supply store, ice, bottling and meat companies, and other businesses. A 35-room hotel with steam heat and electric lights was built, but it was destroyed by fire in 1914. The town developed in a segmented fashion, with most of the population between the railroad branch line and Laurel Creek and the rest next to the highway above the C&O main line, where commercial establishments also were located.

Railroad facilities at Quinnimont were a roundhouse where engines were repaired, a freight and passenger station, a yard office/signal tower, and a switching yard. The yard office, dismantled in 1981, was the last significant example of the town's late Victorian railroad architecture. Most of the town's population left in the 1950s after the mines and lumber operations closed. Quinnimont today consists of a large train yard, two churches (which served the town's black and white residents), a gas station, an abandoned school, and a few houses.

The National Park Service has acquired several historic structures, along with associated garages and outbuildings. Among those structures are the Ashley/Plumley house and other houses known by names of former occupants: the Opal Kessler, Judy Bowles, Thomas Bowles, Robert Bowles, and Willis houses. There is also the Quinimont Missionary Baptist church, which remains in active use. Two federally owned structures, including the Ashley/Plumley House, which was characteristic of the better quality architecture of the gorge in the late 19th century, have recently been destroyed by fires caused by vandals.

Grandview Sandbar. No cultural resources have been identified at Grandview Sandbar.

Prince Brothers' Store. The small town of Prince was named for William Prince, a former Confederate soldier. With his brother, James F. Prince, William bought 300 acres surrounding the present townsite in 1870. (One source indicates 400 acres were purchased in 1873). The brothers, who later amassed considerable wealth through investments in land, banking, and coal company assets, shrewdly anticipated the business advantages of locating at this particular spot along the route of the not-yet-completed Chesapeake and Ohio Railroad. They built a store and a home and sold a right-of-way to the C&O, with the stipulation that the location remain a regular train stop. However, the town of Prince was begun by owners of the Royal Coal and Coke Company, who operated a mine across the river from Prince at Royal.

After the railroad was completed, the strategic location of the community as a regional shipping center was widely recognized, and the C&O established a station there in 1880. William Prince was appointed station agent and later, in 1889, opened a 32-room hotel to accommodate the

large numbers of wagoners who arrived from outlying areas to load and transfer goods and merchandise. A ferry was also put into service to transport wagons across the river. It operated until it was rendered obsolete by a railroad bridge constructed in 1899 to serve the Piney (Creek) branch line of the C&O.

A post office was established at Prince in 1889, and James Prince was named postmaster. He held the position until his death in 1922, at which time duties were transferred to his nephew (William's son), also named James F. Prince. The post office originally was in a building adjacent to the present Prince Brother's Store; later it was moved into the store, where it remained active until the mid-1980s.

William Prince operated his store until 1893, transferring the business at that time to his sons, James and Frank Prince. The brothers continued operations until 1937. Subsequent owners and lessees retained use of the store for general merchandise and groceries until operations were finally ceased in 1984. It was acquired by the National Park Service in 1985.

A firm construction date for the Prince Brother's Store is not known, although it is estimated at sometime around 1900. Before that, the store may have operated from other locations in the vicinity. The present structure was listed on the National Register of Historic Places in 1986. It is considered locally significant as the last surviving commercial building of its type along the New River. The store was unique in never having been a company store in the common traditional sense of coal mining towns in the New River Gorge. Its association with the regionally prominent Prince family was cited as lending further justification for eligibility.

The store is a two-story frame structure typical of West Virginia's late Victorian

rural "boomtown" architecture. Distinctive architectural features include the large plate glass windows of the facade's three bays, a bracketed mid-level cornice along the facade, the cornice detailing, and the overhanging eaves of the roof line. The structure retains a good deal of its original fabric in a relatively unaltered condition, although it has experienced structural damage in the rear from a collapsing retaining wall and faces overall deterioration from weathering. A distinctive stone and wrought-iron fence extends east of the store adjacent to the highway in front of the former Prince homesite, which is also federal property.

The Prince Brothers' Store is the last significant turn-of-the-century building in the community. An adjoining store building on the west was removed; its site is now a parking lot. The old hotel also has been razed, as has the Prince home, which was behind and east of the store. A significant example of early C&O railroad architecture was lost recently with the demolition of the Prince signal tower. A passenger station constructed in 1946 continues to operate at Prince under the authority of Amtrak. Built at a cost of nearly \$100,000 to handle the increasing demand for passenger service, the station was at the time considered the finest along the C&O line between Richmond and Huntington.

Royal. The abandoned coal mining community of Royal is across the river from Prince. In 1891, the Royal Coal and Coke Company, under the ownership of James Kay and James Laing, opened a mine in the Fire Creek seam near the site. It was reportedly the first coal mining operation in Raleigh County, and for many years production was placed at 600 tons a day. Prior to 1899, when the railroad bridge was constructed across the river to serve the Piney branch, the company loaded coal into half-ton buckets and delivered it over an aerial tramway across the river to

C&O coal cars at Prince. Today the site contains only concrete foundation remains overgrown with secondary vegetation.

McCreery. The small community of McCreery was named for J.T. McCreery, who in the 1880s transported cargo on a flatboat, or *bateau*, along the stretch of river between Piney Creek and Prince. Before the C&O railroad was completed, bateaux were an important means of transporting lumber and other provisions down stretches of the river, and they evidently continued to serve a valuable function until the railroad built bridges and branch lines to reach locations on the opposite (left, or west) riverbank. The site of McCreery was a strategic unloading point for river traffic because of the rapids directly downstream, which could capsize boats and cargo. Freight was moved out of the gorge at this point by horse and ox teams over a difficult route up Badoff Mountain (originally called Bateaux Mountain). No historical remains dating to this early phase of river traffic exist at McCreery. The site now consists of a recently vacated modern (1950s-1960s) store and residences.

Terry Beach. As a relatively modern development of private seasonal and year-round homes, Terry Beach has no cultural resources of historic significance.

Army Camp. Army Camp, sometimes known as Camp Prince, is located on the Stretcher Neck bend of the river. It was used by the U.S. Army during World War II to train soldiers in the use of rafts and the construction of pontoon bridges for fording heavy equipment. Remnants of concrete pads and footings remain at the site from that period.

Terry. Terry was a coal mining community that developed in two levels on the Raleigh County (west) side of the Stretcher Neck bend of the New River; one level along the old lower road and the other

higher up the side of the gorge, on a wide bench. Mining was conducted at the Terry no. 1 and no. 2 mines in the early 20th century, and some mining occurred as late as 1967. A sawmill was another important local industry. By the 1920s, the town comprised about 60 houses, a boarding house, a Baptist church, a school, and a large building that housed the company store, a post office, and the coal company office. Today Terry consists of several recreation camps and deteriorated miners' houses, all privately owned.

McKendree Hospital Site and McKendree Road. The small community of McKendree originated before 1880; census records for that year indicate that lumbering was the principal occupation. At that time, the area's rapidly developing coal mining industry increased the lumber trade, with demand for mine support timbers and building materials for construction of tipples and other facilities.

In February 1899, the West Virginia legislature passed an act that provided for establishment of three hospitals in the state's coal mining regions. "Miners' Hospital no. 2" was authorized at McKendree to serve as the primary emergency care facility in the New River Gorge. Although it was designated a miners' hospital, preferential admission was given to individuals who had suffered any job-related injury, and treatment was provided free of charge.

The hospital, an imposing 3-story red brick and stone structure, was opened in 1901 on 6½ acres of land donated by Col. Joseph L. Beury, an early New River coal entrepreneur. The hospital site, a relatively level bench about 100 feet above the river, was considered ideal for the healthful recovery of patients, being "... far removed from the smoke and filth of the mines and railroads, and from any disturbing saloon influences ..." (West Virginia, State Board of Control 1910: 119). In 1910 the hospital

expanded its activities to include a school for nurses. At that time it had a capacity of 42 beds, which was thought inadequate to handle the increasing patient load.

The site, which eventually encompassed more than 120 acres, contained additional facilities, including a boarding house, superintendent's and nurses' living quarters (built in 1916), and other outbuildings. The grounds were carefully landscaped with terraced lawns and gardens. Still at the site are remnants of original rock walls, skillfully built by Italian stone masons.

During the early years of the hospital's operation, patients arrived by way of the C&O Railroad. The McKendree Road was completed between Thurmond and Prince in the 1920s to provide access to the hospital, although a cindered road reportedly led to the site before 1906. The narrow, winding McKendree Road was laboriously cut into the steep side of the gorge by pick and shovel, often passing directly above the C&O tracks. Mules and carts were used to haul materials.

In 1941, the hospital was discontinued and converted into a home for aged black citizens. That institution was closed in 1956 and the residents were moved to Huntington. After being abandoned, the hospital buildings were scavenged and vandalized; they were razed in 1969. The site now contains remnants of concrete outbuildings, rock walls, and terraced building sites increasingly overgrown by dense vegetation.

Thayer. The coal mining community of Thayer was founded shortly after 1900 by the Ephraim Creek Coal and Coke Company. The company operated the Buffalo and Slater Mines, which were acquired in 1926 by the New River Coal Company. The "clean, well-ordered" town was arranged with houses and company buildings aligned on either side of two streets

separated by the C&O tracks. Other houses were scattered upslope. Approximately 20 well-constructed two-story houses were built; some remaining examples exhibit distinctive "L-shaped" floor plans. Smaller, less substantial housing was situated at the top of the mountain near the mines.

Thayer eventually boasted a Methodist Episcopal church, a company store, three schools (two for white students and one for black students), a depot, a theater/amusement hall, and other businesses and services. The population was estimated at 500 in 1923, down from reports of as many as a 1,000 in 1910. Several permanent residences and summer houses remain in the community, which has a year-round population of fewer than 30 people. The only federally owned structure in Thayer is the simple white frame church next to McKendree Road, presumed to be the former Methodist Episcopal church. The townsite contains several privately owned examples of distinctive residential architecture characteristic of early mining communities in the gorge.

Campsites for Boater Use. No cultural resources have been identified along the river at locations (such as Silo Rapids) that boaters sometimes use for day or overnight activities.

Mary Ingles Trail. A long-distance trail passing through New River Gorge National River is being planned. The trail will commemorate the escape route of an early settler, Mary Ingles, who was captured by Indians about 1755 and taken far downstream. She eventually escaped and made her way back along the river.

SOCIOECONOMIC ENVIRONMENT

As a whole, population is gradually declining in communities inside the national river boundary in Middle Gorge. There are few

public services and very little commercial base within the small communities that continue their private existence in the Middle Gorge — Thayer, Terry, Quinimont, Prince, and Terry Beach. Many permanent residents are retired, others of working age depend entirely on outside employment. A few households have no working members and are dependent on public assistance programs.

Many homes in these communities are used only on weekends or during vacations by families with a permanent residence outside the area. Children must attend schools outside the community. A few small general stores offer limited merchandise, but for the most part the permanent residents shop in nearby larger towns like Beckley and Oak Hill.

Timbering and coal production, the historically dominant economic forces, have been drastically reduced throughout the region and specifically in and around the Middle Gorge unit. To a certain extent they have been replaced with alternate forces, including light manufacturing, tourism, and the residential/commercial development related to development of interstate highways and retirement communities.

Tourism, and in particular whitewater river rafting, plays a significant role seasonally, but profits and benefits of this industry are fairly well confined to owners, river guides, and drivers, many of whom are transient employees attracted from other areas. Most whitewater rafting companies are located outside the immediate area of Middle Gorge because the prime rafting areas are downstream. Recreational kayakers and canoeists (as distinct from fishermen) tend to be relatively young, are from recently arrived families, or come from some distance away.

Fishing and, to a lesser extent, hunting are recreational interests of many local resi-

dents, including those living within the boundaries of the national river. These activities also attract visitors to the area, with some local economic benefits from tackle and bait purchase, boat rental, and overnight accommodations. However, many anglers, especially those who come from nearby, either do not stay overnight or simply camp in one of the informal areas along the river such as Army Camp or Grandview Sandbar, so the local economic effect is small.

The surrounding larger communities are middle- to working-class in character. Extensive lands are still in agricultural use, yet many areas previously cleared for timbering or farming have reverted to heavy secondary forest growth.

VISITOR USE

Background

Visitor statistics specifically referring to the Middle Gorge are not available. Table 5 contains selected figures for New River Gorge National River as a whole for 1984 through 1991. A substantial increase in total recreation visits in 1991 reflects the opening of a major new visitor center at Canyon Rim and the inclusion of visitation at Grandview for the first time. For river use (primarily rafting), it should be noted that there was virtually no use before the mid 1970s; after that, commercial use in particular expanded explosively to the 60,000–80,000 range of the late 1980s.

Traditional past and current use of the Middle Gorge by recreational visitors can be roughly divided into two groups: (a) whitewater river rafting, kayaking, and canoeing and (b) shore-based camping, picnicking, and fishing from the bank and from small boats. To date, few recreational visitors have been noted on foot or by vehicle simply exploring or photographing

the historical and natural features along McKendree Road or in the small communities nearby.

Whitewater Activities

The whitewater user group is divided between commercially operated trips (primarily in inflatable 6–10 passenger rafts and some single seat rubber inflatables called "duckies"), private kayakers, and a few canoeists. The white water of the middle section of the river offers a few class III opportunities (on a scale of I to VI, where class I is quiet, undisturbed water and class VI is impassably rough) separated by lesser rapids and a number of quiet water stretches. There is considerable seasonal variation in difficulty ratings as water levels, speed, and volume fluctuate. Overall, the river here is considerably calmer than it is from Thurmond downriver to Fayette Station, or the even rougher Gauley River to the north, both of which are heavily used by local commercial operators and private river-runners.

The intermediate character of the Middle Gorge's white water has led to its increasing use by commercial operators as a beginner's or family-oriented one-day trip. Similarly, it is appropriate for beginning to intermediate kayakers, and privately sponsored training trips for groups are popular. Experienced canoeists can run the Middle Gorge at appropriate water levels. The most common route for all these users is a morning put-in at McCreery and late afternoon takeout at various points near Thurmond. Low water levels can extend the time for this trip considerably, requiring a takeout at Thayer. A few rafters plan to stay overnight in this section either at one of several informal campsites (Silo Rapids is favored) or by special arrangement at a private house several miles below Terry.

TABLE 5: VISITOR USE STATISTICS

Type of Use	1984	1985	1986	1987	1988	1989	1990	1991
Recreation visits	N.A	263,000	394,000	436,000	400,800	412,000	379,000	774,000
River use								
Commercial	82,062	85,316	72,631	72,089	48,874	66,385	51,149	64,077
Private	8,348	10,066	4,239	10,533	4,704	6,718	16,026	6,021
Overnight stays	*	*	2,473	3,403	3,101	1,642	2,221	1,247
Trail use (since 1988)								
Wolf Creek	—	—	—	—	7,169	15,748	3,140	*
Minden	—	—	—	—	10,653	17,529	7,465	7,770

* Not available

The statistics for commercial and private river use (table 5) refer to totals for all sections of the river. Variations in some years (1988, for example) are explained by extended drought conditions, which often left water levels, controlled by dam releases upstream, too low for successful commercial trip offerings. High rainfall years generally provide more opportunities. These variations make it difficult to identify a trend, but commercial operators in general report that their businesses have expanded over this period. However, noting that the tremendous annual growth of the 1970s has definitely passed, operators think the market is becoming saturated on the traditional stretches on which they offer trips, such as Thurmond to Fayette Station and the Gauley. These sections of high use are not shown separately in table 5, but in comparison with those areas, commercial activity in the Middle Gorge as a whole is relatively small.

Operators indicate dramatic increases in business over the past five years, however. Some report that business on the Middle Gorge doubled annually over several recent years. As capacity limitations and market saturation on popular stretches of the river have become an issue, expansion to less popular segments like the middle section has begun. The explanation offered is that operators want to broaden

their market to the less adventurous and family segments. Another factor is that with the rapidly increasing number of commercial operators in the business, competition is forcing them to look for additional markets to stay economically viable.

Private kayaker organizations report that they have not seen large increases in their use of the Middle Gorge in the recent past, but it is difficult to judge private use since some kayakers are not associated with organizations and may come from outside the area.

Camping and Fishing

The National Park Service does not operate any formal campgrounds in the Middle Gorge, but two areas, Grandview Sandbar and Army Camp, traditionally have been used by local and regional residents for a variety of activities, including overnight camping in informal sites where vehicles are pulled into clear spaces near the shore. This kind of camping occurs mostly in July and August. Shore fishing and relaxing are the typical activities of campers here. Picnicking, launching of small fishing boats ("johnboats") and occasionally drinking and music-playing parties are additional activities. These areas are seldom used as put-in or takeout points for

rafters because the McCreery site is more conveniently located and because current road conditions into these areas make trailer traffic difficult. Occasional conflicts between users have been reported in these areas, usually between family-oriented campers or picnickers and party crowds. The only facilities provided by the park staff are portable toilets and trash pickup. Occasional ranger patrols are made during the season of heaviest use.

Users of the two areas seem to be primarily residents of nearby communities or, if from farther away, former residents who developed a habit of using the areas before establishment of the national river. Very little use of these informal camping areas by distant travelers ("national" visitors) has been reported. The camping areas are not publicized in park brochures or other information available from the National Park Service.

Grandview Sandbar, in particular, is used by knowledgeable local fishermen for launching of johnboats or dories because the stretch immediately downstream to McCreery is quiet water and known for good fishing. Experienced dory operators can navigate the Middle Gorge as far down as Thurmond. Some commercial operators offer fishing and hunting trips by dory, but aluminum motor-powered johnboats seldom chance the passage.

Shore fishermen reach the river at Grandview Sandbar and Army Camp, as well as at a number of other points accessible either from WV 41 or McKendree Road. Some of the access points are the abandoned townsite of Royal, Mill Creek, Prince, Quinnimont, Thayer, or elsewhere that McKendree Road is close to the river shore. McKendree Road is poorly maintained, especially from Thayer southward to Prince, and under wet conditions four-wheel drive is sometimes necessary. Anglers with high clearance or 4WD vehicles

sometimes travel southward from Stone Cliff to Silo Rapids or northward from Terry for several miles on rough tracks on river left. Private ownership and maintenance of those tracks mean that their availability to the public is inconsistent.

Anticipated Future Use

According to representatives of commercial operators, it is highly likely that future whitewater use along this part of the gorge will continue to increase for reasons discussed in the previous section. The focus on McCreery-to-Thurmond day trips may broaden to include launching at Mill Creek or even at Meadow Creek, with overnight camping stops before takeout at Thurmond. Use by private rafters and kayakers may not increase substantially, but this projection could be altered if facilities such as additional access points or overnight accommodations along the river were added, or if the area's suitability for those uses was more broadly publicized.

Increases in camping and fishing in Middle Gorge have not been as abrupt as those in commercial rafting. Two alternate prospects for the future seem likely: if only minor improvements were made in areas now used for informal camping and fishing access, and if publicity in official park publications and information continued to be low-key, most users, as at present, probably would be knowledgeable local residents continuing traditional patterns. Total use probably would increase only gradually.

However, if there were significant improvements in camping area access roads and in McKendree Road, and if those areas were identified as worthwhile destinations in the park brochure and at visitor contact points, substantial numbers of visitors from more distant locations would be likely to come to the Middle Gorge. This seems

even more likely given the sharp increases in visitor contacts at the new Canyon Rim visitor center and at Grandview, where both local and national visitors stop for help in planning their visits to the area. Of even greater significance may be the planned extensive historic restoration of Thurmond, which will draw many visitors to this part of the gorge and potentially direct them southward along McKendree Road as a scenic alternative route back to the major highway system.

Interest also is increasing in hiking and mountain biking. More than 6,000 hikers a year are already reported along the recently opened Thurmond-to-Minden Trail, which is the only open section of the much longer proposed Mary Ingles Trail through the Middle Gorge. That trail is expected to go on river left throughout the Middle Gorge — sometimes high on benches

above the river, sometimes down near the water — and it can be anticipated that thousands of hikers eventually will be attracted to it. The gentle grades and generally good surface of McKendree Road are attractive to cyclists with wide-tired mountain bikes, and it is possible that this popular activity will become established soon.

The number of visitors entering Middle Gorge unit could be radically affected by improvements in maintenance of McKendree Road that would make it consistently passable to two-wheel-drive traffic, even if it remained gravel surfaced and low speed. The amount of increase would be directly related to the extent improvements were publicized, identified, interpreted and signed by official park publications and information.

ENVIRONMENTAL CONSEQUENCES

ASSUMPTIONS

In the following analysis of the environmental consequences of each alternative, we have discussed only topics related to site-specific developments being considered. Mitigating measures and recommendations for site-specific surveys are included under each component as necessary.

No public use is proposed at Terry under any alternative, so there would be no environmental consequences in that area, regardless of the alternative selected.

EFFECTS OF THE ALTERNATIVES

Natural Resources

For two specific areas — Prince Brothers Store and Quinnimont — only minor environmental impacts on natural resources would result from implementation of any of the alternatives, because actions for those two areas would be limited to the disposition of cultural resource properties and sites. Therefore, those two sites will not be discussed under each alternative.

Alternative A. There would be no adverse effects on *Terry*, *Terry Beach* or *Thayer* under alternative A because no change in public use or development is proposed for those areas. Adverse effects on riparian habitats would continue from random driving and camping at *Grandview Sandbar*, *Mill Creek*, *Army Camp*, and *McKendree Hospital site* because no changes would be made in access roads to those sites or in their informal use as camp or picnic areas. Random travel by vehicles and campers would continue to affect vegetation and soils. Erosion would increase from runoff along the access roads, which are in poor condition and poorly drained.

Sanitation service and trash removal still would be performed only periodically.

At *Royal*, without addition of stairs or an improved trail, soils, vegetation, and water quality would continue to be degraded under alternative A by random trails to and from the river.

At *McCreery*, mapping and site investigation by the USGS have revealed severe and continuous erosion of the fill material currently used at the informal launch site by private and commercial boaters. The erosion is related to the flows of both Piney Creek and the New River, which vary seasonally as well as during flood events (see *McCreery Floodplain map*). Without stabilization of the fill material, water quality could be adversely affected because erosion and cutting of the side slopes at the launch site would continue.

At Silo Rapids and other *campsites for boater use*, the potential for adverse effects on water quality would continue because there is no public education program on sanitation. Most camping takes place within the zone of the normal rise and fall of the New River; therefore, trash and human waste that have not been carried out typically are washed downriver at least once a year.

There is potential for adverse effects on water quality in the *McKendree Road* area because continuation of a poorly maintained and poorly drained gravel surface would perpetuate uncontrolled storm water runoff. In addition, rill and gully erosion and undercutting of side slopes would continue to occur during storm events.

Development of the *Mary Ingles Trail* and spur trails is not actually proposed in this alternative. Trail proposals will be made

and analyzed in a separate planning effort. However, the no-action alternative does include an assumption that no trails would be built in the near future, which means that where uncontrolled foot travel is adversely affecting vegetation and soils, degradation of vegetation and soils would continue.

Alternative B. Effects on natural resources at **Grandview Sandbar**, **Royal**, **Army Camp**, **McKendree Hospital site**, and **McKendree Road** would be the same under alternative B as those described for alternative A.

In alternatives B, C, and D, any physical development involving ground clearing or excavation and subsequent construction would cause some minor short-term effects during the construction phase: temporary elevation of noise levels by heavy equipment, increased dust from construction activities, and the potential for spillage of petroleum products from construction vehicles.

Riparian habitats at **Mill Creek** would continue to be adversely affected by camping and random driving along the beach area under alternative B because there would be little additional control over those activities. Graveling the access road should lead to a decrease in local erosion and improvement of local water quality.

Development of a launch site and parking areas at **McCreery** would cause surface disturbance on approximately 3½ acres of previously disturbed land. The lower (east) end of the one-way access road at the launch site would be within the 25-year floodplain.

Discussions with park staff engineers, the Army Corps of Engineers, and the U.S. Fish and Wildlife Service have indicated that a number of mitigating measures and regulatory considerations would need to

be implemented with development of the **McCreery** launch site. Core samples would need to be taken to determine the precise composition, stability, and erosion potential of the fill material. Riprapping and cribbing could be incorporated into the design to increase stability and decrease erosion during flood events. However, periodic grading and placement of additional fill material in response to flooding would have potential adverse effects on water quality by perpetuating erosion; this practice is not recommended.

The area proposed for development of parking and comfort facilities (west side of Piney Creek) is not within the floodplain (see **McCreery Floodplain** map) and has been previously disturbed. There are some indications that this disturbance may have exposed perennial springs and channeled runoff from WV 41 to the extent that vegetation north of the proposed parking area resembles a wetland. Careful design of the proposed parking area should allow its development outside the potential wetland. Runoff from the parking area itself needs to be properly planned so that it will not adversely affect the potential wetland either by increasing the amount of water or by degrading water quality with runoff of petroleum products from the pavement or, later, from vehicle use. None of the proposed development under alternative B would adversely affect Piney Creek.

At **Terry Beach**, the floodplain and water quality could be adversely affected if the proposed parking, toilet, and changing room were near the water's edge (at the site of the federal structures). In addition, facility design would have to be done with consideration of periodic flooding because much of the federally owned land that would be developed is within the two-year floodplain.

Development of a public access site at **Thayer** under alternative B would have the

potential to cause adverse impacts. A site-specific survey for rare and endangered plant species would need to be completed before development could begin, since previous surveys have revealed the presence of Steele's meadowrue, a rare plant, in the Thayer vicinity.

Development of **campsites for boater use** at Silo Rapids and other places could cause minor adverse effects. Clearing of vegetation on a number of sites could adversely affect riparian habitats and areas prone to flooding.

As with alternative A, development of the **Mary Ingles Trail** and spur trails is not actually proposed in alternative B; trail proposals will be made and analyzed in the separate trail planning effort. As trails are completed, concentration of use onto a single properly designed trail might lead to improvements by allowing vegetation to be restored. However, vegetation and possibly wildlife would be affected where trails affected previously undisturbed areas.

Alternative C. Effects on natural resources at **Mill Creek** under alternative C would be similar to those described for alternative B. Severe effects on riparian vegetation would be reduced by better control of access along the beach area and better defined campsites. Site-specific surveys of rare plants, floodplains, and wetlands would have to be completed before development could begin, and design would have to account for periodic flooding.

Development of primitive camping, parking, and picnic sites at **Grandview Sandbar** under alternative C would result in an overall improvement in environmental quality because elimination of random vehicle travel in sensitive riparian areas and along beaches would reduce adverse effects on vegetation and habitat. No rare, threatened, or endangered species are known to be present in the area; however,

site-specific surveys for rare plants and wetlands would have to be done before any development could begin. In addition, design would have to account for periodic flooding because the lower access road, which is also used for camping, lies within the 25-year floodplain. Water quality would benefit from better maintenance and drainage control and from improvement of the access road. These measures also would reduce the potential for erosion. As mitigation, when use of the area increases, shoulder stabilization and drainage control would be implemented as necessary.

Alternative C would result in an overall improvement in environmental quality at **Royal**. Construction of a stairway and/or trail to the river, coupled with revegetation of exposed areas, would help to eliminate erosion caused by the present random trails and would minimize the potential for continued or increased erosion.

Construction of a launch site and parking areas at **McCreery** would cause surface disturbance on approximately 3½ acres. There is potential for adverse effects on water quality and the floodplain. Other effects described for alternative B would be applicable to alternative C.

At **Terry Beach**, removal of the federal structures would not result in any adverse environmental impacts. Since there would be no public use of the site, no effects on natural resources would be expected.

Overall, environmental quality at **Army Camp** would be improved under alternative C through development of primitive camping, parking, and picnic sites because random use would be eliminated. Development would take place in approximately 5 to 10 acres, but little additional clearing would be necessary; hence, effects on vegetation and wildlife would be minimal. Better maintenance of the state portion of the access road and graveling of

the NPS portion would lead to improved water quality by minimizing the present erosion that leads to rills and gullies. When necessitated by increased use of Army Camp, drainage control and shoulder stabilization would be implemented to mitigate potential adverse effects.

Water quality at Army Camp could be adversely affected by disturbance of soils that might have been contaminated by hazardous wastes during the Army's use of the site in the 1940s. Although there is no obvious evidence of hazardous waste containers or underground leachate in the area, a site-specific survey would have to be conducted before any development could begin.

Elimination of random vehicle travel in sensitive riparian areas and along beaches at Army Camp would reduce adverse effects on vegetation and habitat. There is potential for the existence of rare plant species at Army Camp; a site-specific survey would have to be conducted before development could begin so that adverse impacts could be avoided or mitigated.

Because of the extensive floodplain at Army Camp and the potential for wetlands, any development in the floodplain requiring permanent structures would need to be designed to accommodate periodic flooding. Without proper design, there would be potential for adverse effects on the floodplain, riparian habitat, vegetation, and soils at Army Camp.

At **McKendree Hospital site**, water quality would be improved under alternative C through upgrading of the access road, including controlled drainage and better maintenance.

Clearing of vegetation and development of parking and picnic spaces at McKendree Hospital site would potentially affect less than 1 acre. Previous reports suggest the

presence of running buffalo clover, a federally listed endangered species, in this vicinity. Clearing of vegetation could adversely affect that species; therefore, a site-specific survey and consultation with the U.S. Fish and Wildlife Service would be necessary before clearing could begin. In addition, given the small feeder streams and riparian vegetation present, the potential for small wetlands near the hospital site would need to be investigated before vegetation clearing could begin.

There would be no significant adverse effects on natural resources at **Thayer** under alternative C.

As in alternative A, the potential for adverse effects on water quality would continue at Silo Rapids and other **campsites for boater use** under alternative C because of the absence of a public education program on sanitation.

Drainage improvements to **McKendree Road** under alternative C would reduce rill and gully erosion and undercutting of side slopes from storm events. Pavement would be beneficial in eliminating frequent grading and the associated increase of sediments in runoff, but it would cause a negative short-term impact by increasing hydrocarbon loading from fresh asphalt. This adverse effect would be less significant than the improvement in storm water management and decrease in slope erosion that would result from better shoulder maintenance and from drainage improvements to channel runoff into appropriate erosion-protected channels. Shoulder stabilization and vista clearing would cause some loss of roadside vegetation and wildlife habitat.

Any clearing for vistas and picnic sites would have the potential to cause adverse effects on rare or endangered plants, which could exist along the McKendree Road in the vicinity of Thayer and at the

abandoned site of McKendree Hospital. To avert adverse effects on running buffalo clover or Steele's meadowrue, a site-specific survey and consultation with the U.S. Fish and Wildlife Service would have to be completed before any clearing of vegetation could begin.

Accelerated development of the **Mary Ingles Trail** and other trails under this alternative would mean that analysis of environmental impacts would have to be done in advance of the park's long-range trail planning process. Effects on natural resources would not be specifically predictable until specific trail corridors were selected. In general, beneficial effects can be anticipated when a single well-constructed trail replaces random off-trail use because effects on soils and vegetation are concentrated in one corridor. However, when trails are built in previously undisturbed corridors, there is potential for wildlife disturbance as well as impacts on soil, water, and vegetation from trail construction activities.

Alternative D (preferred). Effects on natural resources from alternative D would be the same as those described for alternative B at **McCreery** and **Mary Ingles Trail**. At **Mill Creek, Royal, Terry Beach, and McKendree Hospital site**, effects on natural resources under alternative D would be the same as those described for alternative C. Effects on natural resources at **Grandview Sandbar** and **Army Camp** also would be like those of alternative C, but because the actions would be implemented in phases at those two sites under alternative D, the times at which effects occurred might be somewhat different.

Adverse impacts on natural resources at **Thayer** would be minimal under alternative D. However, before development of any public access site could begin, a site-specific survey for rare, threatened, or endangered plant species would need to be

completed because previous surveys have identified the presence of Steele's meadowrue in this vicinity. In addition, consideration would have to be given to periodic flooding.

Adverse effects on water quality at the **campsites for boater use**, including those at Silo Rapids, would be minimal under alternative D, given full development and adherence to a public education program to improve sanitation. However, as mitigation a monitoring program of all potential campsites should be implemented when necessitated by increased use to ensure proper management of sanitation and litter by private and commercial river users. Effects on vegetation, floodplains, and riparian habitat would be minimal because additional clearing and development would not be implemented.

At **McKendree Road**, the potential for adverse effects on natural resources would be less under alternative D than at present because drainage improvements would reduce rill and gully erosion and undercutting of side slopes during storm events that occur with the present poorly drained surface. With the improved gravel surface proposed under this alternative, there would be a potential for periodic sedimentation after maintenance grading or fresh graveling, but asphalt impacts that would occur under alternative C would be avoided. The periodic sedimentation would be less significant than the decrease in slope erosion and the improvement in storm water management brought about by better shoulder maintenance and drainage improvements designed to channel runoff into appropriate erosion-protected channels. Shoulder stabilization and vista clearing would cause some loss of roadside vegetation and wildlife habitat.

As in alternative C, any clearing for vistas and picnic sites would have the potential to cause adverse effects on rare or endan-

gered plants, which could exist along the McKendree Road in the vicinity of Thayer and at the abandoned McKendree Hospital site. To avert adverse effects on running buffalo clover or Steele's meadowrue, a site-specific survey and consultation with the U.S. Fish and Wildlife Service would need to be completed before any clearing of vegetation could begin.

Cultural Resources

As mentioned earlier, no changes are proposed for **Terry** under any of the alternatives.

Regardless of the alternative selected, if development would involve disturbance of previously undisturbed surfaces, archeological investigation would be required before any surface disturbance could begin. If significant archeological resources were discovered, appropriate mitigation or avoidance strategies would have to be implemented in consultation with the West Virginia state historic preservation office (SHPO) under provisions of the 1990 programmatic agreement (see "Consultation and Coordination").

Alternative A. As the no-action alternative, Alternative A would not involve any changes of use, alterations, or development of known historical or archeological resources; therefore, it would not lead to any direct adverse effects on cultural resources other than those already occurring. However, "no action" does not mean that park management would be relieved from its responsibilities to protect significant cultural resources listed on or eligible for the National Register of Historic Places. It is the responsibility of the National Park Service to avoid indirect deterioration or destruction of these resources through neglect. As a matter of policy, preservation measures to protect or stabilize historic structures and prevent further deterioration

must be carried out according to the "Secretary of the Interior's Standards and Guidelines for Historic Preservation Projects" contingent on determinations of national register eligibility and final decisions regarding treatment. That policy is applicable regardless of what development alternative may be chosen.

Alternative B. Because there would be no change in use or development under alternative B at **Royal, McKendree Hospital site**, or **McKendree Road**, there would be no effects on known cultural resources at those sites other than effects already underway. Although some physical development would be carried out at **Grandview Sandbar, McCreery, Terry Beach**, and the **campsites for boater use**, there are no known significant cultural resources at those sites; therefore, no effects would be expected. The requirement for archeological clearance before surface disturbance mentioned above would apply in these sites as well.

The farmstead at **Mill Creek** would be researched and evaluated for national register eligibility before a decision was made to protect, stabilize, or remove it. As described in the "Alternatives" chapter, the National Park Service would consult with the SHPO and the Advisory Council on Historic Preservation regarding the appropriate treatment. If the structure was retained and stabilized, the effect would be to make it available as part of the historic scene and interpretive story of the national river. Removal would mean it would not be available in the future for further study, public use, or interpretation except indirectly through the documentation prepared in consultation with the SHPO.

Structures within the historic district at **Quinnimont**, all of which would be stabilized, would be indefinitely protected against further structural degradation. Partial protection from vandalism and fire

would be afforded through burglar and fire detection alarms. Structures not a part of the historic district and not otherwise eligible for the national register would be removed with a minimum of further documentation and study. This could result in some loss of historical information.

The demolition of the **Prince Brothers' Store**, as called for in alternative B, would result in an adverse effect on that property, which is listed on the National Register of Historic Places. Under requirements of the 1990 programmatic agreement among the National Park Service, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, the Park Service would consult with the West Virginia SHPO and the Advisory Council in fulfilling responsibilities under section 106 of the National Historic Preservation Act. Consultation would result in a memorandum of agreement signed by the agencies concerned. The memorandum would outline acceptable conditions for mitigating adverse effects. Mitigation probably would consist in whole or in part of recording the structure to appropriate standards of the Historic American Buildings Survey before its removal.

Actions at **Army Camp** would be the same as those described for alternative A; that is, uncontrolled, informal camping and river access would continue. The concern that cultural resources not deteriorate through neglect (see alternative A, above) is especially relevant at Army Camp because of the potential for uncontrolled access to lead to disturbance of as yet unknown archeological resources or the foundations and other remnants of the army's World War II training activities.

At **Thayer**, if disturbance of previously undisturbed surface was proposed for the public access and boat launching/takeout area, archeological clearance would be

required before disturbance could begin. The NPS-owned church would be evaluated for national Register eligibility, and appropriate protection would be carried out if it was determined significant. Effects would be similar to those described for Mill Creek and Quinnimont.

For the **Mary Ingles Trail** and other trails, action would be deferred to the separate trail planning effort, and environmental effects of trail selection and construction would be dealt with in that planning. Effects of trails on cultural resources depend largely on the specific route; they can be negative if a trail physically disturbs a cultural property or if it facilitates access to improperly protected cultural resources. On the other hand, effects can be positive if a trail serves to concentrate visitor use in certain areas, avoiding or channeling use through a cultural site.

Alternative C. Effects on cultural resources at **Mill Creek** would be the same under alternative C as those described for alternative B. There would be no new adverse effects on cultural resources at the **campsites for boater use** under this alternative. At **McCreery and McKendree Road**, no cultural resources have been identified that would be affected under alternative C.

All federally owned structures at **Quinnimont** would be preserved as part of the historic scene regardless of their national register status. For effective interpretation of the townsite and significant historic properties, additional historical and architectural research would be necessary.

Designation of spur roads and campsites at **Grandview Sandbar** would limit random vehicle use and expansion of disturbed areas, both of which would tend to limit disturbance of any archeological artifacts that may be present.

Stabilization of the **Prince Brothers' Store** and a feasibility study to explore the possibility of store rehabilitation for adaptive use would not adversely affect that national register property provided rehabilitation was determined a viable alternative and carried out according to "The Secretary of the Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings." Stabilization alone would provide some protection, but it would not entirely prevent the potential vandalism to which unused, unoccupied structures are susceptible.

The site of **Royal** would be mapped, recorded, and evaluated as a historical resource. Additional research would be necessary for wayside interpretation of this early mining community. Posting signs to identify the area, which is not often patrolled, would have the potential to increase vandalism or illegal collection of artifacts among the ruins. Mitigating measures would include more frequent patrol and statements in interpretive materials that such disturbance is prohibited.

At **Terry Beach**, no significant known cultural resources would be affected; the two structures to be removed are recently constructed simple temporary residences.

Archeological investigations would be conducted at **Army Camp** in the Stretcher Neck area before development of the access road, boat launch area, or campsites could begin. If any significant archeological sites or features associated with World War II army activities were discovered, appropriate strategies for protection or mitigation would be implemented.

The addition of interpretive trails and clearing of vegetation at the **McKendree Hospital site** would not adversely affect cultural resources provided trail design and supervision of construction were adequate. Increased visitation would not pose a di-

rect threat to stone wall and foundation remains if the trails were properly placed and messages discouraging vandalism were provided. To comply with the obligation to investigate potentially significant properties, the site would be mapped, recorded, and evaluated as a historic resource. These actions also would provide assistance in site interpretation.

At **Thayer**, detailed historical and architectural research would be necessary to provide information for wayside interpretation of the church and townsite. After evaluation of the NPS-owned church for national register eligibility, appropriate protective measures would be carried out if the structure was found to be significant. Sensitivity would have to be exercised to ensure that wayside information did not direct visitors to explore privately owned historic properties or trespass against the wishes of private landowners.

Accelerated implementation of the **Mary Ingles Trail** and other trails would have the potential for disturbing archeological or historic resources along trail routes, which have not yet been determined.

Alternative D (preferred). Under alternative D, the effects on cultural resources at **Mill Creek, Quinnimont** and the **Mary Ingles Trail** and other trails would be the same as those described for alternative B. Effects on cultural resources at **Royal, McCreery, Terry Beach, McKendree Road, McKendree Hospital site**, and the **campsites for boater use** would be the same under alternative D as those described for alternative C. Effects on cultural resources at **Grandview Sandbar** and **Army Camp** also would be like those of alternative C, but because the actions would be implemented in phases at those two sites under alternative D, the times at which effects occurred might be somewhat different.

The preferred alternative would not result in any adverse effects on the historic **Prince Brothers' Store**. Additional protection would result from stabilization of the store and from the addition of barriers to discourage parking. Because the structure would not be open for public use, the protection this usually provides would be absent, and the potential for vandalism and its most serious consequence — fire — would remain, mitigated to some degree by installation of fire and burglar detection systems.

Effects on cultural resources at **Thayer** under alternative D would be essentially the same as those described for alternative B, but if negotiation resulted in the use of an already-disturbed site, disturbance of cultural resources would be less likely.

Socioeconomic Environment and Visitor Use, All Alternatives

The intent of the three action alternatives is to provide modest physical development to control and facilitate recreational uses that are already occurring, such as camping, fishing, picnicking, and whitewater rafting. Most of the development proposed in the alternatives would not be expected to stimulate rapid expansion in these activities; the projection of continued growth in those uses is based on other factors.

However, improvement and better maintenance of McKendree Road and its promotion through visitor centers and brochures as a scenic route for national river visitors (alternatives C and D) could substantially increase traffic along that route. This would lead to more people passing through Thayer and possibly Prince and Quinnimont. A larger number of visitors would have the opportunity to experience the inner gorge, an opportunity that is little used at present. A spread of economic effects to surrounding communities such

as Beckley, Mount Hope, and Oak Hill might be possible, but it would be hard to distinguish these from economic effects related to a general increase in tourism in the region.

Proposed physical development such as construction of launch facilities at McCreery (alternatives B, C, D) and improvements in camping areas (alternatives C, D) would bring short-term economic benefits to the local job market if local contractors were the successful bidders. Long-term creation of new jobs cannot be predicted; no new positions would be anticipated as a direct result of any of the alternatives. However, some seasonal positions related to commercial rafting might increase. If traffic increased substantially along McKendree road, some private entrepreneur development might be expected in the small communities where there is currently almost no commercial activity.

Improvements to Army Camp, Grandview Sandbar, and Mill Creek (alternatives C, D) would be primarily intended to control adverse effects on resources that are being caused now by uncontrolled camping and vehicle use. However, those improvements probably would make the areas more attractive for campers and lead to increased use, even though the camping areas would continue to be designated as "primitive" and would not be actively publicized or promoted by the National Park Service.

Increased use at Army Camp would result in increased congestion and traffic on the access road, which leads through a private residential development. This could be irritating to residents; however, improvements to the road as proposed in alternatives C and D might mitigate those problems.

As in other units of the national river, increased recreational activity in the Middle Gorge would inevitably bring some change

to the character of local communities and even to lifestyles of individual residents. Local residents who now hike, explore, camp, and fish at favorite areas known to only a few people by word of mouth probably would have to share those spots with increasing numbers of visitors from outside the local area, and that sharing could be considered an adverse impact. From the perspective of visitors, however, access to those areas might substantially increase the variety and enjoyment of their park visit.

Eventual implementation of the trail system, including the Mary Ingles Trail (all al-

ternatives) probably will result in more hiking and mountain biking. Issues such as providing adequate trailheads, parking, security, and trail regulations will be dealt with in the separate trail planning effort.

In general, the developments proposed by alternatives for Middle Gorge would provide for better control of visitor activities, which would lead to fewer conflicts between users even with an increase in overall use.

CONSULTATION AND COORDINATION

PUBLIC INVOLVEMENT

As a usual and required element in the preparation of this draft *Development Concept Plan/Environmental Assessment*, the planning team organized and conducted several general public meetings in communities most related to Middle Gorge development. In addition, the team sought out and solicited comments from several citizen or business groups known to have special interest in the Middle Gorge.

Early public involvement was conducted in two stages. The first stage, generally known as *scoping*, was intended to identify major issues and concerns that the public would like to see addressed in the plan. Citizens and groups involved in scoping had an opportunity to be included on a mailing list to receive further information and be involved in additional reviews. The second stage, often considered optional but here considered essential to keep the public informed and involved, was an informal review of draft alternatives before the National Park Service selected a preferred alternative.

The third — and current — stage of public involvement consists of formally providing this draft plan to the public for review of the alternatives and the preferred course of action. Responses to this draft will be

considered and addressed before a proposed development plan is selected for implementation. The meetings and contacts that took place during public involvement for the Middle Gorge draft *Development Concept Plan/Environmental Assessment* are summarized in table 6.

TABLE 6: PUBLIC INVOLVEMENT CONTACTS

Type of Contact/Specific Event	Date	Location	Estimated Attendance
Scoping			
Public meeting	11/28/90	Glen Jean	30
Public meeting	11/28/90	McCreery	70
Meeting with commercial rafters ¹	1/16/91	Glen Jean	4
Meeting with private boaters ²	1/17/91	Glen Jean	3
Review of alternatives			
Meeting with private boaters ²	7/8/91	Charleston	18
Meeting with commercial rafters ¹	7/10/91	Glen Jean	6
Public meeting	7/10/91	Glen Jean	35
Public meeting	7/11/91	McCreery	45

1. Members of the West Virginia Professional Outfitters Association.
2. Members of the West Virginia Wildwater Association.

ISSUES AND CONCERNS

In addition to oral comments, during the public meeting at McCreery on November 29, 1990, the planning team received a citizens' petition signed by 108 residents of Army Camp road, Prince, Quinnimont, McCreery, and Terry, West Virginia. The petition was a strongly worded recommendation that the National Park Service consider development at Army Camp that would improve the entry road, provide some level of camping and picnic facilities, and provide additional ranger patrols to address what was characterized as "drinking and disorderly gatherings" and fears for personal safety by family groups seeking to picnic and camp.

That petition and other specific comments and suggestions received during all meetings have been incorporated into the files of this planning project. The main issues and concerns that were expressed played a direct role in the development of the various alternatives presented in this draft plan. Ultimately, when one alternative is selected, it is not possible to propose every development suggested or address every issue raised by the public.

The principal issues and concerns that arose during public involvement were the following:

River Access

Use of Middle Gorge by private boaters and commercial outfitters offering raft trips has increased dramatically in the past several years and is expected to continue increasing.

A primary river access point needs to be developed to serve both commercial and private boater interests; the McCreery site appears to offer the best opportunity.

Secondary access points would be appreciated at one or more of the following locations: Grandview Sandbar, Army Camp, Mill Creek, or Thayer.

Roads

McKendree Road has definite potential as a scenic route, and certain improvements should be provided to facilitate its use. However, the present width and gravel surface should not be upgraded because of concern that those

improvements would increase use too much and encourage excessive speed.

The National Park Service should consider the implications of development at Thurmond and Grandview (the former state park) and possible long-range effects such as increased traffic along McKendree Road.

Recreation

In addition to provision of services for commercial and private boaters, attention should be paid to other traditional users of the Middle Gorge such as campers, bank fishermen, and picnickers. Facilities for day use and camping at Army Camp, Grandview Sandbar, and possibly Mill Creek would meet many of the needs of these users.

There is growing interest in hiking, bicycling, and horseback riding in the Middle Gorge; some consideration should be given to these activities.

Cultural Resources and Interpretation

Certain cultural resources in the Middle Gorge area are locally perceived to be historically significant. These include the Prince Brothers' Store, McKendree Hospital site, buildings, monuments, the furnace and coke ovens in Quinimont, and the farm at Mill Creek. Consideration should be given to further protection of these sites and their interpretation so that local residents and visitors may better appreciate their importance in the history of the New River.

CONSULTATION, COORDINATION, AND COMPLIANCE

Natural Resources

Development on the floodplain of the New River within the Middle Gorge will comply with the guidelines of the Water Resources Council for implementing Executive Order 11988: "Floodplain Management," *Federal Register*, February 10, 1978. Before any development can begin, a statement of findings will be completed to disclose the findings of the floodplain investigation and design requirements.

Surveys and mapping for the National Wetland Inventory have not been completed for this area of West Virginia. The U.S. Fish and Wildlife Service and the U.S. Army Corps of Engineers will be consulted before proposed development is begun to determine the potential for wetlands. If development is proposed in probable wetland areas, the NPS Water Resources Division will have to determine the wetland delineations.

The U.S. Fish and Wildlife Service and the Army Corps of Engineers have been consulted for compliance with section 404(b) (1) of the Clean Water Act. Upon completion of site-specific designs, the National Park Service will obtain the appropriate federal and state permits.

The National Park Service will continue consultation with the USFWS and the West Virginia Department of Natural Resources regarding site-specific surveys for rare, threatened, and endangered plant and animal species. Any development will be preceded by necessary clearances from federal and state agencies.

To address concerns about possible erosion and storm water runoff, the National Park Service will consult with the state of West Virginia and will file a sedimentation plan with the state before beginning any development or construction.

Cultural Resources

All undertakings proposed in this draft plan that could potentially affect significant cultural resources will be reviewed in accordance with the 1990 programmatic agreement among the National Park Service, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation. Adherence to the provisions of that agreement will satisfy National Park Service responsibilities under section 106 of the National Historic Preservation Act. Of special relevance is the section that requires archeological investigation before any surface disturbance can begin.

As outlined in stipulation C of the programmatic agreement, undertakings that have been determined to be programmatic exclusions will be reviewed internally within the National Park Service for conformance with NPS cultural resource policies and guidelines. (Examples of programmatic exclusions are preservation, maintenance, stabilization, and limited rehabilitation work consistent with the Secretary of the Interior's Standards.)

All other undertakings will be reviewed in consultation with the West Virginia state historic preservation officer and the Advisory Council under the council's regulations (36 CFR 800) implementing section 106.

APPENDIX: CULTURAL RESOURCE CONCERNS

INTRODUCTION

The National Park Service has certain obligations to ensure protection of resources listed on or eligible for listing on the National Register of Historic Places. This involves consideration of the several protection strategies outlined below. Selection of a particular treatment is done in consultation with others, in particular, state historic preservation offices, as described in the "Consultation, Coordination, and Compliance" section.

A site or structure may be physically protected through *stabilization* of deteriorating walls, foundations, exterior coverings, or interior finish. Stabilization may be selected when there is an intention to allow some form of public use or to install interpretive information; this action will protect the structure as well as ensure safety of the visitor. Stabilization also may be elected as a kind of "holding" action when a public or operational use is not immediately planned, but some future use is anticipated and desirable.

Another option beyond stabilization is *restoration*, meaning to bring a structure back in careful and precise detail to a certain period, usually to interpret as a example of that period. Another level is *rehabilitation*, when the structure is adapted to some public use that will not compromise its historical integrity, such as a museum or a workplace for local artisans, who might also demonstrate or sell traditional crafts. Rehabilitation typically involves restoration of the external parts and some internal modifications to provide for the modern use, but without substantially altering the building's historic appearance.

Other uses of rehabilitated buildings could be those that would benefit operation of

the park: a building might be used as an employee residence, a ranger station, or a maintenance division office.

A fourth option is *reconstruction*, in which a building is duplicated with new materials, but to original specifications. This option typically is selected when a structure is beyond repair yet is clearly needed for interpretation.

An alternate possibility might be to move the structure intact and restore or rehabilitate it in another location where protection is better assured and a legitimate public or operational use is feasible. Moving raises the question of whether the structure's historic integrity would be unacceptably compromised, which may be the case when the structure and site are closely related.

There is yet another option, selected only when a listed structure may have seriously deteriorated to the point that it has lost its historic integrity, has become irreparable, is a safety hazard, or otherwise cannot be protected. This is to carefully study, measure, photograph and record the structure and then demolish it. Another choice, in which study and documentation also are required, is to simply let the structure deteriorate and eventually disappear. This solution usually is acceptable only in isolated areas, where safety is not an issue. For a property listed on or eligible for the National Register of Historic Places, these two treatments are considered adverse impacts, and they require especially close collaboration with the state historic preservation office and the Advisory Council on Historic Places as well as the general public.

Selecting any of these options either as an alternative or later as a preferred treatment depends on a number of consider-

ations. For example, it is important to understand the history and use of the building and to be able to relate it to the story of the park in general and its major interpretive themes. If there are direct and important relationships to this wider story, then there is good potential for the building or site in interpreting the park to visitors. If, on the other hand, these relationships are weak or the site's significance is limited to a very local area, the interpretive potential also is limited.

In addition to understanding the interpretive potential of a site, it is essential to study the feasibility and safety of letting the public approach or enter the area. If allowing the public to drive to and park near the structure would cause significant disturbance to the historic scene, this would influence the selection of a preferred alternative. Since visitor safety is one of the highest priorities in park operations, allowing public use would be acceptable only if safe approach, parking, and entry could be assured.

The physical condition of a structure and the feasibility of correcting safety concerns within the building also are issues. Similarly, the safety of park employees must be considered if the alternative is to adapt the structure to a park operational use.

Finally, since financial resources are limited and must be prioritized, the cost of various protection alternatives must be considered. Important in assessment of the difficulty and cost of various protection strategies are the physical state of a building, especially its main structural features such as foundation, floor supports, walls and roof, and the degree to which the building may have been altered over the years (its integrity). For example, the cost of stabilizing and providing simple security measures, which is the minimum level of protection the park is required to provide, may be all that can currently be afforded;

restoration or rehabilitation costs, which typically are much higher, may be impractical to consider at the time so that they must be scheduled for some future date. Even if demolition is selected, there would be costs associated with required surveys and consultation procedures as well as physical removal.

With this introduction, the following discussion of specific cultural sites in the Middle Gorge is provided to help the reader understand why the various alternatives, including the preferred alternative, have been presented.

DISCUSSION OF SPECIFIC SITES

Prince Brothers' Store

This analysis provides background for the three alternatives: stabilize and protect the Prince Brothers' Store building as part of the historic scene without allowing public use; proceed with some level of restoration and public use with on-site parking; survey, document, and then demolish the structure.

The store is already listed on the National Register of Historic Places. Its eligibility derives from its local significance as the sole remaining example of a long-standing and successful private general merchandise store and its association with a prominent Middle Gorge family whose forebears helped establish the community of Prince. Architecturally it illustrates many features of the "Victorian boomtown" style of frame structures in West Virginia; relatively few such structures still remain. The store is especially interesting because it has undergone relatively little change externally or internally since its original construction around the turn of the 20th century.

Because it was a store and U.S. post office for more than 70 years, the store

played an important role as a location for both commerce and social contact from about 1900 through 1984 in the little community of Prince. Prince was typical of the Middle Gorge towns that existed primarily to switch, load, and service the railroad and the coal and timber industries it served. But Prince itself was not exclusively a mining town; this explains why the town's principal store was privately developed rather than being company-owned.

In terms of its relationship to principal interpretive themes already established for New River (see "Planning Objectives and Issues" section), the store and its representation of the town bear mostly on rapid industrialization at the turn of the century, and human-caused changes in the gorge's ecosystem and appearance.

If the store could be interpreted only from the outside, interpretation would be a brief description of the role it played in community life and the part the town of Prince played in the development of the New River coal, timber and transportation industries; that is, in the rapid industrialization of this section of the United States.

If the interior of the store was available, possibly as a museum or as a working store, the interpretive potential would be considerably more extensive. The store's own history, its role in the community, and a more detailed treatment of the role of Prince and other Middle Gorge communities in the coal, timber, and transportation industries could be provided. The distinction between private and company-owned stores also could be explained. Company-owned stores were more common in small coal towns, but there are few examples of these stores left in the Gorge, and none within the national river's boundaries.

However, these interpretive potentials will be difficult to realize unless it is feasible and safe to allow public access to either

the outside or the inside of the structure. There are certain constraints — the most significant is that the building, built in the early 1900s along a dirt track serving horse-drawn carts, today stands only four feet from the pavement of a modern state-owned two-lane highway where traffic speeds, although posted at 35 miles per hour, typically are 50 mph or higher. The road is confined by railroad tracks entering the nearby Amtrak station; the back of the store is located at the toe of a steeply sloping hill. A small parcel of empty federal land on the west side of the store is now used informally for parking. The federal parcel on the other side of the store contains ruins of the former Prince home.

Analysis of vehicle entry and exit to the present parking area indicates a problem with adequate sight distance; that is, the minimum visual distance needed for a motorist to safely enter and exit a highway considering the anticipated speed of the highway's traffic. The fact that the store is located on a curving, slightly undulating section of road is responsible for the sight distance problem. Before minimum sight distance criteria could be met, traffic would have to be slowed to 20 mph by aggressive signing, rumble strips, and other warnings.

An option might be to shift the store backward into the hillside. Although this would lessen the danger of the building being hit by a vehicle or of a visitor in front of the store being struck, it would not significantly improve sight distance. Use of the federal property east of the store for entry and parking would not provide adequate sight distance either, and it would destroy the ruins of the Prince home foundation. Providing parking some distance away, where sight distance was adequate, is an option, but it would require a relatively long walk along the busy highway and across private lands, and a safe pedestrian crossing of the highway would be needed. An at-grade

crossing poses certain risks, and a bridge or tunnel would lead to questions about visual intrusion, cost and maintenance.

The possibility of relocating the building to a place where safe parking could be made available raises other concerns. The most relevant is that if this building was moved even a short distance it would lose its relationship to the historic locale — at the center of activity around the tracks, the early train station and hotel (both now gone), and the Prince family home. This would seriously compromise its integrity and lower its potential for interpretation.

Moving the store intact to a more distant location, even if a compelling use for it there was recognized, would be impractical because of intervening railroad bridges and narrow winding roads; it probably would have to be dismantled and reassembled. This would lead to compromise of historic integrity even if interpretive value remained.

Analysis of the condition and integrity of the store by a historic architect and a structural engineer reveals that the major

structural components are still intact and functioning. The structural problems that were noted — a foundation that could fail if not repaired and a deteriorating wooden sill — will not pose serious problems to correct. External stabilization of these and a few other components, including deteriorated clapboards and window trim, would not be very costly or difficult, but there is a chance that other problems have not yet been discovered.

Rehabilitation as a museum, a store to be leased out, or an employee residence would entail the same external stabilization plus repair of non-structural ceiling, wall, and floor deterioration in the building's interior, reinstallation of electrical and water service to local code, and many other repairs. None of these repairs appear complicated, but they would be labor-intensive and costly if the store's historical integrity was to be maintained.

To complete this analysis of the interpretive potential, safety, and feasibility, of the Prince Brothers' Store, costs have been estimated for several different treatments of the store, as shown in table Ap-1.

TABLE AP-1: ESTIMATED COSTS FOR DIFFERENT TREATMENTS, PRINCE BROTHERS' STORE

Option	Includes	Cost/ Gross Construction Cost
*Stabilization in Place; No Public Parking or Entry	Removal of vegetation, clearing of trees, installation of foundation drain, repair of parapet and coping, repair or replacement of sill beam and stud/joists, installation of louvers for ventilation, fire detection and burglar alarms	\$114,000
Stabilization or Shifting Backward; No Public Parking or Entry	All above plus moving building backward 10-25 feet and additional foundation work	\$180,000
*Rehabilitation in Place, Public and/or NPS Staff Use	External restoration and interior rehabilitation, with improvement of structure and utilities for use as a museum and working general store or employee residence, burglar alarm and fire sprinkler system, adjacent parking for eight vehicles	\$1,090,000
Relocation and Rehabilitation; Public Use	Rehabilitation as above after moving building to a distant location; preparation for public use	\$1,180,000
*Survey, Documentation, and Demolition	Measurements, photographs and other documentation to Historic American Buildings Survey Level I, demolition of structure and restoration of site, with necessary SHPO consultation	\$17,500

These are very general and preliminary, based only on the size of the store (4,440 sq. ft., or 2,200 sq. ft. each floor). The treatments marked with an asterisk are those considered as alternatives.

In summary, it appears that the Prince Brothers Store is locally significant and does have a relationship to the park's primary interpretive themes. It has some interpretive potential even if only available to the public from the outside, but its greatest value would be as a museum or working store open to the public, if rehabilitation for such a use is possible. However, it seems that providing safe access to the store, for the public to view externally or to enter, or for employee use, would be very difficult.

Moving the store to a different location, either nearby or distant, would compromise the building's integrity to the extent that its interpretive potential would be very low. The cost of various levels of treatment ranges from a low of \$17,500 to document and demolish it to \$1,180,000 to relocate and rehabilitate it.

Structures in Quinnimont

The remaining federally owned structures in Quinnimont (four former residences and their outbuildings, and a small church) are potentially eligible to be listed on the National Register of Historic Places as a historic district, but they have not yet been nominated. The loss of a sixth federal structure, the Ashley-Plumley House, in July 1992 and the previous loss of another, both to fires started by vandals, though unfortunate, probably will not affect the eligibility of the district.

The five Quinnimont structures have varied histories and interpretive potential. Four are basically residences. The Ashley-Plumley House (recently burned) was the

largest and most elaborate; the Kessler House was originally a school, then a church and then a residence. The two Bowles houses (of similar floor plan) apparently were built as residences, as was the Willis House. The relatively newer Missionary Baptist Church building has been a church for many years, but it may have been built for another purpose. The Kessler House is the most architecturally distinctive of the remaining structures; it has some high fashion details and attractive design. The other residential buildings, although not architecturally remarkable, are examples of West Virginia's common building types in that historical period.

The greatest interpretive potential would be realized if these buildings were presented as illustrating the development and significance of little towns like Quinnimont, that is, as the historic scene of a company town. The potential for rehabilitation of any of the buildings for use by the public or for park operations seems limited. The building known as the Missionary Baptist Church is still used as a gathering place by a small group of Quinnimont residents, and use by the general public would not be appropriate. The now unavailable Plumley House was located within view of the highway and was large enough to have had some potential as a museum, but the next best candidate, Kessler House, is farther from the road, smaller, and probably inappropriate for such adaptive use.

All these buildings are still structurally sound and would not present serious problems for either stabilization or rehabilitation. Current problems involve mostly roof leakage, which could lead to interior damage if not corrected, and localized foundation failures, which are less urgent but would have to be remedied before public use could be allowed. Only the church, with its periodic use and caretaking by a community group, appears to be maintain-

ing its condition, although there are some structural problems that need immediate attention.

In the absence of stabilization, the other structures are gradually deteriorating and probably would reach a condition from which they could not easily be recovered in three to five years. This estimate does not include unpredictable events of vandalism and possible fires, which in the past three years claimed two of the seven structures originally purchased.

All the Quinnimont buildings but the Willis House are accessible from an unpaved road that leads off WV 41. Both intersections of this road meet sight distance requirements, provided speed limits of 30 mph are effectively enforced. Should some public use be proposed either for external interpretation or inside the structures, it would be possible to provide a few parking spaces along this unpaved road. Parking along the road edge of WV 41 does not appear to be a safe alternative. Access to the Willis House, on the river side of the highway, is not safe for the general public because the access road at WV 41 enters at an acute angle.

None of the federally owned structures are particularly well-located for potential visitor use. The most convenient location for

safety in exiting and entering the flow of traffic on WV 41 is in the area of the U.S. Post Office and an adjacent privately owned residence and an unoccupied garage. That area also is closest to the geographic center of what remains of Quinnimont. There is no federally owned land in this location.

In table Ap-2 a comparison is presented of estimated costs to stabilize, adaptively restore, or document and then demolish each of the five Quinnimont structures. These are class "C" estimates; they are subject to considerable revision when more specific plans are developed.

In summary, it appears that the highest interpretive potential for the federally owned structures in Quinnimont is not as individual structures but as a collective representation of the historic scene. Simple interpretation from outside the buildings is all that would be required for this. No compelling need to rehabilitate any of them for public or park use is indicated. It would be possible to provide safe parking and road access to most of these structures if desired, but it would not be very convenient in terms of visitor use. A more central location from which a variety of stories about Quinnimont could be told would be preferable. However, other locations are not federally owned.

TABLE AP-2: COSTS OF VARIOUS TREATMENTS OF QUINNIMONT STRUCTURES

Structure Name	Stabilization	Rehabilitation	Documentation and Demolition
Kessler House (1,570 sq. ft.)	\$112,000	\$320,000	\$6,500
Quinnimont Church (1,120 sq. ft.)	45,000 (+ 5,000 immediately)	233,000	6,000
J. Bowles House (950 sq. ft.)	56,000	138,000	3,000
R. Bowles House (980 sq. ft.)	66,000	142,000	3,000
Willis House (1,500 sq. ft.)	92,000	216,000	3,000

The McKendree Hospital Site

The McKendree Hospital site, also under consideration for listing on the national register, represents an interesting story that could be related to the park's broader themes of coal, railroading and timber industries because it is tied to the health of industry workers. The hospital buildings have no potential for restoration since nothing but foundation traces remain. Only some of the major retaining walls, which define the extent of the site, are candidates for stabilization. It seems most appropriate that the story be told through existing historic photographs to contrast to the current obliterated site. Clearing of some vegetation and minimal stabilization of the retaining walls (costing less than \$3,000) would aid in this contrast. Low-key interpretation and self-discovery seems the best approach in this area, which probably will not be visited much over the next several years.

Thayer

The church in Thayer, the single federal property in this tiny community, is potentially eligible for the National Register of

Historic Places. There is an opportunity to interpret not only the structure but the history of the community and this section of the gorge. Not much information is available on the building itself, but it does not appear distinctive in form or architectural style. It has no current public use, formal or informal, and is unoccupied.

No operational use of the church building has been suggested by park management. The nearby McKendree Road is little used and presents few safety hazards for one or two vehicles parked in front of the building. The Thayer church might be made available as a community center, but this option has not been assessed within the community. It does not seem to warrant conversion to a museum, a ranger office, or an employee residence at this time, given the small visitation anticipated through the area. Its location close to occupied dwellings probably affords some protection from vandalism and unauthorized use.

Costs to stabilize the Thayer Church are estimated at \$46,000; restoration costs are estimated at \$92,000; to document and then demolish would cost an estimated total of \$5,000.

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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering wise use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people. The department also promotes the goals of the Take Pride in America campaign by encouraging stewardship and citizen responsibility for the public lands and promoting citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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